

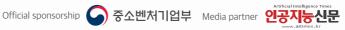
KOREAStartups

AI STARTUPS REVOLUTIONIZE **ALL INDUSTRIES**









I'm Kim Byung Hun, Chairman of Korea artificial intelligence association.

Currently in 2019, AI technology is changing its state from 'finding out' to 'impact' in important business decisions.

Using the estimate of the progress AI technology has made progress in the past decade makes very difficult to estimate the progress the AI technology will make in the next decade.

AI already has implemented in many industries, it will be difficult to find an industry that won't be affected by AI technology.

Industries based on AI technology is crucial asset even for the national point of view.

Therefore the KORAIA has formed an organization called 'AI convergence business group' for networking, knowledge and synergy between the participants.

We expect to benefit all of the participants, such as business and government.

We proudly introduce the rising stars of the Korean AI companies and announce 'AI convergence business group', which will be the framework of the AI activities.

The new future has already began.

Kim Byung Hun

Chairman of Korea artificial intelligence association.

To actualize the World's Best DNA(Data, Network, AI) Korea!

Hello, this is Park, Young-sun, Minister of the Ministry of SMEs & Startups (MSS), which promotes the slogan 'Connecting makes things stronger!'



I would like to extend my heartfelt congratulations on the publication of 'AI Korea Startups.' I also would like to express my appreciation to the Korea Artificial Intelligence Association for their efforts to help AI startups blossom in Korea. As the importance of AI utilization is growing, I believe that this book will provide a meaningful source of information about AI startup status at a glance.

The era of the Fourth Industrial Revolution can be called as the era of AI. This is because the Fourth Industrial Revolution, which is characterized by convergence & integration through connecting various industries and technologies, can create synergy through AI technology. Thus, major countries in the world are already vigorously moving forward to make AI vital to their key focus of government agendas.

The Korean government is also aware of AI's significance. It selected data, network, and AI as its top three strategic investment areas in 2018 and announced plans to invest KRW 1.7 trillion in August this year.

The Ministry of SMEs & Startups is also endeavoring to invigorate AI. Therefore, the Ministry of SMEs & Startups has come out with a strategy to make year 2020 'the World's Best DNA Korea,' a country where data, network, and AI are infiltrating our daily lives. We are preparing policies in many fields including smart factories, smart stores, and smart services so that AI is woven into the fabric of our lives. The Ministry of SMEs & Startups will lay the foundation for the small- and medium venture companies, and self-employed and small businesses to utilize AI and put our efforts to back up their potential.

I hope that this publication of 'AI Korea Startups' will contribute to the vitalization of the AI industry. Thank you again for the efforts of the Korea Artificial Intelligence Association and those who have strived to publish this book.

Park, Young-sun Ministry of SMEs & Startups November 2019



ALL INDUSTRIES

"KOREA AI Startups" is a handbook published by the Korea Artificial Intelligence Association (KORAIA) to understand the current business status of leading Korean Artificial Intelligence companies to utilize data for setting policies.

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If you have any questions or suggestions about the contents of the handbook, please contact us.

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RALA

사단법인 한국인공지능협회 | 200 KOREA AI STARTUPS REVOLUTIONIZE ALL INDUSTRIES



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0.8L 0.8L Corp.

www.08liter.com

Company Identity

0.8L has AI solution that analyzes consumer's organic reviews with Artificial Intelligence, provides 'customized experiences' and satisfactory purchases to consumers, and provides 'hit products prediction' service to manufacturers to reduce development and advertising costs, as well as marketing direction.

☐ Tech & Service Info

Cove Al	■ Visual Intelligence		☐ Sound Intelligence		■ Language Intelligence	
	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics	
Core Al		Reinforcement learning		onomous driving	□ AGI	
	□ AEI		□XAI		□ Etc	
Framework		Tensorflow based in-house platform		Data type &	Review in 0.8L platform & SNS information of	
				Secure	membership	

Company's Core Al Explain

0.8L platform also serves as a means for partners to monitor the market. The big data-based hit product prediction algorithm is an artificial intelligence algorithm based on reviews of products that have been used in the past and data on actual hits thereafter.

Product and Service Overview

The 0.8L platform connects product sellers and consumers (reviewers). Consumers get the free or lowest priced products within nine days when the product arrives home and write a product review which should be shared. Reviewers will soon become consumers and will can make the best purchases without worry because of the producted recommended by of many reviews.











Business model	Recommendation and Prediction Service by own platform					
Target market	The domestic e-commerce market(100 trillion won in 2019) and 3					
rarget market	trillion dollars worldwide.					
Customers	Pulmuone, Ottogi, Orion, Amore Pacific, GS Retail, CJ Healthcare,.					

Future plan

In the future, the company aims to leap as a review big data-based AI commerce company by providing hit products prediction services to partners and customized shopping services to consumers to secure more partners, products, and consumers.

	Name	0.8L Corp.	Establishment	In 2014	C.E.O	Choi Chang Woo		
Phone +82 70-4323-0582		E-mail	help@08liter.	help@08liter.com				
Main Business Field			Social commerce platform with Al					
	Main Product and Service		0.8 Liter Platform					
	Investmen	t history	3 billion won(6 investment companies, 13 individuals, '17)					



4IND CO. LTD.

www.4ind.co.kr

Company Identity

4INDInc. is a solution specialist that has gathered experts to become a leader in the fourth industry(an industry that uses soft power to make factories and products intelligent)

☐ Tech & Service Info

Core Al	■ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
	■ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI	
	□ AEI		□ XAI			☐ Etc
Framework Darknet, Ten		Darknet, Tensflow		Data type & secure	im	age files (self)

Company's Core Al Explain

The control solution for smart city has the function to analyze and monitor people, objects and situations based on deep learning based artificial intelligence. It also includes traffic analysis services such as vehicle and pedestrian counting, vehicle speed and congestion. Intelligent vision inspection solution for smart factories is intelligent inspection software that can inspect multiple items simultaneously in real time and high speed based on deep learning.

Product and Service Overview

Same as Company's Core Al Explain



- Malaysia Smart City Pilot Project





Business model	Software, Smart City Service, Vision Inspection Service			
Target market	Southeast Asia / 10 Billion Dollar			
Customers	MyTraffic(Malaysia) Smart City, ART(Singapore)			
Future plan				

Promote cloud-based services with integrated solutions

Name	4IND CO. LTD.	Establishment	In 2017	C.E.O	Lee Chae Soo	
Phone +82 54-456-3401 E-mail		info@4ind.co.kr				
Main Busi	ness Field	Software R&D				
Main Product and Service		Smart City Platform, BOM Platform				
Investmen	t history	N/A				



4S Mapper

www.4SMapper.com

☐ Company Identity

4S Mapper is specialized in spatial information-based **image processing** (artificial satellite, aviation, and drones) and Al-based **image analysis**.

☐ Tech & Service Info

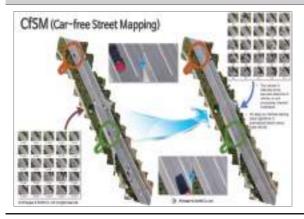
Core Al	☐ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence
	■ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics
	■ Reinforcement learning		■ Autonomous driving		☐ AGI
	□ AEI		□XAI		□ Etc
Framework TensorFlow			Data type & secure	Image Data / Self	

Company's Core Al Explain

On-road vehicle image removal solution that uses deep learning and drones

Product and Service Overview

Road cracks and damages can lead to serious accidents and make it hard to maintain the road. These problems in turn cause increased civil appeals from road users and high maintenance costs. In order to deal with these problems, we came up with an idea to combine drones with artificial intelligence technology. We remove cars image on the roads in order to detect current road status. This can give periodic safety information data, which is necessary for maintenance.





- 2019 KORAIA, Al-Tech Certification
- 2019 Seoul Metropolitan, Award Certification
- 2019 AI EXPO KOREA, The first prize winner award,
- 2019 World IT Show, Grand prize award









Business model	License, SaaS, etc.				
Target market	B2G, B2B, B2C / 1Billion				
Customers	Government, Automobile/Telecom/Web Portal/Map Corp etc.				
Future plan					

Production of precise and safe map for autonomous vehicles

Name	4S Mapper	Establishment	In 2016	C.E.O	LEE Seungho	
Phone +82 17 266 4396		E-mail	rsgis@paran.com			
Main Busi	ness Field	Al, Spatial Information etc.				
Main Product and Service Car-free (CfS			, Car-free Stree	et Mapp	ping)	
Investmen	t history	ongoing				



42Maru Inc.

www.42maru.ai

Company Identity

42Maru is a startup based on Artificial Intelligence (AI) technology that develops a Deep Semantic Question Answering (QA) platform that accurately understands the user's query intent and derives only single answer from a vast array of unstructured data.

□ Tech & Service Info

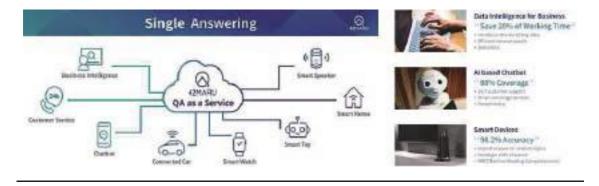
Como Al	■ Visual Intelligence	☐ Sound Intelligence	■ Language Intelligence
	☐ Data Driven / Modeling	■ Data Processing	☐ Hardware / Robotics
Core Al	■ Reinforcement learning	☐ Autonomous driving	■ AGI
	☐ AEI	☐ XAI	☐ Etc
Framework	Own Technology	Data type & secure	Multilingual Language
rramework	Own rechnology	Data type & secure	Intelligence

Company's Core Al Explain

- NLU(Natural Language Understanding) : semantically understands a question
- Paraphrasing : Converts context information of a text expressed in natural language into a semantic presentation
- MRC (Machine Reading Comprehension) : Al technology that understands a user's questions based on deep learning and provides a single answer

Product and Service Overview

Deep Semantic Question Answering (QA) platform - accurately understands the user's query intent and derives only single answer from a vast array of unstructured data



- 2018.11. Ranked no. 1 in the SQuAD 2.0 competition (Stanford University)
- 2018.10. Techstars London 2018
- 2018.12. Ministry of Science and ICT (MSIT) Award
- 2019.09. 5th KGCCI Innovation Awards 2019 Innovation in Digitalization









Business model	ness model Global Enterprise Data Intelligence Market(based on SaaS)		
Target market	Cognitive Computing market: +\$50bn (year 2025)		
	Samsung Electronics, LG Electronics, SK Innovation, LG U+, KT, SK		
Customers	Broadband, Hyundai & KIA Motors, DSME(Daewoo Shipbuilding & Marine		
	Engineering), Shinhan finance group, DGB finance group, etc		
Future plan			

"the Next Generation of DATA Engineering is Question Answering" 42Maru will be the Global no.1. Enterprise Provider for SaaS platform

Name	42Maru Inc.	Establishment	In 2015	C.E.O	D.K. Donghwan Kim	
Phone +82 2-6952-9201 I		E-mail	withus@42maru.ai			
Main Business Field		Data Intelligence for Business, Al based Chatbot, Smart Devices				
		Deep Semantic	QA(Question A	nswering) Platform - accurately	
Main Product and Service		understands the user's query intent and derives only single				
		answer from a vast array of unstructured data.				
Investmen	t history	Series A(In preparation)				



Accufly Al., LTD

www.accufly.ai

	Company	Identity
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Accufly AI is a Korea-China joint venture between Hancom Group, a leading ICT company in South Korea, and iFLYTEK, one of the four major artificial intelligence BATi companies in China. Based on Hancom's competitive Korean AI engine and technology, 30-year Korean word development capability, iFLYTEK's globally competitive AI technology, and many successful business references, Accufly AI is working on next-generation AI contact center in fintech, MICE, AI translator, simultaneous interpretation conference and lecture solutions, and OCR R&D solutions.

Tech	&	Service	Info
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Core Al	☐ Visual Intelligence		Sound Intelligence		■ Language Intelligence	
	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI	
	□ AEI			□XAI		☐ Etc
Framework Our own's Date		a type & secure Voice foreign		and parallel corpus of languages with korean		

Company's Core Al Explain

Speech Recognition, Semantic Understanding, Machine Translation, Speech Synthesis, OCR

Product and Service Overview

<Hardware and Voice Solutions>

① Al translator, GenieTalk Go!

-Online Translation : 65 languages including korean, chinese, japanese, english, vietnamese and thai

-Offline Translation : 4 languages(korean, chinese, japanese, and english)

-Image Translation (OCR) : 12 languages supported

-Travel Helper(weather, money exchange rate, etc)APP, Support of overseas u-sim

2 Al Smart Conference Solution, GenieBiz

-Al conference conductors that support conference and lecture records and translations

-Meeting book shorthand/lecture functions, QR code supports distribution of minutes

-Translations in four languages(korean↔ chinese, japanese, english)

-Hancom Office supports file formats including various office documents

<Financial Fintech>

3 Callbot-based AI Contact Center

-Modularized solution to implement Al voice consultation and to enable interconnection of time frames

-Support the highest recognition speed and accuracy of the domestic voice recognition technology market

-Provide solution operations and performance management tools (interface, guidelines, manuals, etc.)

-Provide tools to help you learn language identification quickly and easily to improve consultation

-Check solution load, operational statistics and customer use of voice recognition

4 Deep Learning-Based OCR Solution

-Own deep learning OCR engine

-Obtain accurate and meaningful data by recognizing tables/forms



- 2019.03.13. Signing Ceremony for Joint Venture
- 2019.07.16. Al translation machine, GenieTalk (GenieTalk) launch and service start.
- 2019.09.02. Shinhan Futureslab 5th FinTech Al Startup Competition
- 2019.11 Al simultaneous interpretation conference and lecture solution, GenieBiz will be released.



Business model	Smart translation, Smart office, Al service, Smart education		
Target market	 Smart translation: personal travel and business work/10 million dollars Smart office: intelligent construction of office and conference room/150 million dollars Al service: government, operators, financial and other enterprises in the field of telephone customer service/50 million dollars Smart education: educational institutions, public schools, private schools, language learning institutions, individuals, etc/120 million dollars 		
Customers	Hancom, iFLYTEK, Financial Institution		

Future plan

- Performance improvement, spread, and usability improvement of Al-based hardware solutions, GenieTalkGo and GenieBiz.
- Embedded full package solution in callbot-based Al contact center and secured multiple references
- Commercialize OCR packages based on deep learning and secure references to maximize work efficiency
- Advanced solutions through various industry-academic cooperation

Name	AccuflyAl.,LTD	Establishment	In 2019	C.E.O	SoonYoungOh & WuXu Zhang
					A WUNU Zhang
Phone	+82 31)627-7011	E-mail	best@accu	ufly.ai	
Main Business Field		Smart transla education	tion, Sma	rt office	e, Al service, Smart
Main Product and Service		GenieBiz, GenieTalk Go, Al Contact Center, OCR solution			
Investment history		Private			



Company Identity

Acryl Corp. provides one-stop AI services to customers who want to build AI services through Jonathan $^{\text{TM}}$, an integrated AI platform, used for processing data, developing AI including NLU & empathic AI, and building infrastructure.

☐ Tech & Service Info

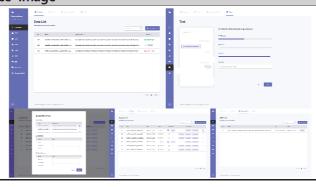
Come Al	■ Visual Intelligence	☐ Sound Intelligence	■ Language Intelligence
	☐ Data Driven / Modeling	■ Data Processing	☐ Hardware / Robotics
Core Al	☐ Reinforcement learning	☐ Autonomous driving	☐ AGI
	■ AEI	■XAI	☐ Etc
Framework	Tenserflow /keras /pyt	orch Data type & secure	video, images and natural language data. (Self)

Company's Core Al Explain

Jonathan™, the integrated AI platform developed by Acryl, uses a deep-learning hyperneural network to recognize and analyze emotions, images, text and audio to come up with answers that aren't just factual, but match the mood of the person asking a question. Jonathan is composed of Jonathan Brain which is AI library, Jonathan Frame which is server technologies for managing and operating AI models, Jonathan Tools which supports to collect, cleanse, annotate a data.

Product and Service Overview

Jonathan Brain; composed of high-performance natural language understanding techniques, multi-modal emotional recognition techniques, and deep learning models for building chatbots. Jonathan Frame; an infrastructure solution for building and operating optimized AI services such as GPU clustering and memory sharing technology. DevOps solution that supports the development, deployment and operation of optimal deep learning models is included in Jonathan Frame.



- 2018.01 the IF design award for 'HAWAYOU',
- 2018.12 Minister's award of Science and ICT at the '2018 Korea SW R&D Awards',
- 2018.12 most prestigious award at the 'The 13th Korea Internet Award'
- 2019.02 Contracted with KAI for 'big data platform development(pilot)'









Business model	SaaS, Al Platform		
	B2B format chatbot OEM market for healthcare, insurance, finance and		
Target market public / government,			
	and AI resource distribution and acceleration framework markets.		
Customers	Customers Healthcare, Insurance, Finance and Public / Government,		
Futuro plan			

B2B format chatbot OEM for medical, recommendation services, finance, public / government Substitution of some hospital counselors, 24-hour consultation service for small hospitals such as plastic surgery, dermatology, dentistry, etc. The domestic chatbot market of 2020 is about 36 billion KRW, Jonathan Frame is a solution that helps reduce resource waste and improves performance by introducing an infrastructure that supports deep learning processes for individuals and enterprise developers who want to introduce AI.

Name	acryl corp.	Establishment	In 2011	C.E.O	park wei jin	
Phone	+82 2-557-4958	E-mail eric@iacryl.com				
Main Business Field		Al platform				
Main Product and Service		Jonathan Brain, Jonathan Frame, Jonathan Tools				
Investment history		5 billion won(Medichiinjvestment, etc.,'16~'18)				



AgileSoDA

www.agilesoda.ai

Company	Identity
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AgileSoDA is providing a variety of high-performance Software Defined A.I. that enables businesses to be agile – by adapting to market and customer changes and also by making optimal decisions.

Framework		SparklingSoDA	Data type & secure	Image files (self)	
	☐ AEI		□XAI	☐ Etc	
Core Ai	■ Reinforcement learning		☐ Autonomous driving	□ AGI	
Core Al	☐ Data Driven / Modeling		☐ Data Processing	☐ Hardware / Robotics	
	☐ Visual Intelligence		☐ Sound Intelligence	☐ Language Intelligence	

Company's Core Al Explain

In the area of AI technologies and services, AgileSoDA focus on automating tasks and supporting efficient decision making. To help companies make decisions, AgileSoDA provides solutions that enable them to adopt AI more quickly and "learn to learn" on their own.

Product and Service Overview

SparklingSoDA - Al DevOps Portal for Enterprise

BakingSoDA - Decision Agent Maker Based on Reinforcement Learning

AestheticDoc - Embedding Algorithm-Based Document/Text Search, Analysis, and Classification Solutions

Product and Service Image



SparklingSoDA BI



BakingSoDA BI



AestheticDoc BI

- 2019.06.18. Korea Startup Award
- 2019.05.23 Grand Prize for SMEs





Business model	Main Business: Sales and development of Al-based analysis software				
business model	and analytics consulting				
Target market	Replace with existing BI market AI base				
Target market	Global 16.3 trillion won (based on 2020)				
Customers	Banking, card, insurance, public, manufacturing, etc.				
F					

Future plan

- Helping companies internalize Al
- Contribute to the popularization of the latest technology
- The spread of AI technology in Korea

Name	AgileSoDA	Establishment	In 2015	C.E.O	Daewoo Choi	
Phone	+82-2-558-8300	E-mail	gh.ju@agilesoda.ai			
Main Business Field		Enterprise Al software and services				
Main Product and Service		SparklingSoDA, BakingSoDA, AestheticDoc				
Investment history		ongoing				



Al Contents LAB

www.aicontentslab.com

Company	Identity
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We Al Contents LAB study and develop the Explainable Al System including customer privacy, safety, security, and governance related with legal guidelines or principles When we develop Al system, especially, we focus on the 2 principles: Alignment and Embedment. The former means EASD(Ethically Aligned System Design); the latter refers to EESD(Ethically Embedded System Design).

1	Took	0	Service	Info
ı	ı ecn	Čα	Service	into

	☐ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
Core Al	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
Core Ai	☐ Reinforcement learning		☐ Autonomous driving		□ AGI	
	□ AEI		■ XAI		☐ Etc	
Framewo	DataPipeline		Data Type &		Data: No Restriction	
rramewo	Learning ModelPip		eline Secure		Data. NO Restriction	

Company's Core Al Tech Explained

Research-Development-Service: Xai Governance System

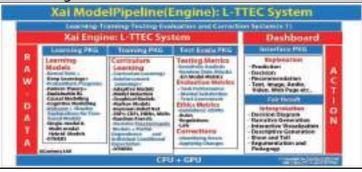
- : Xai DataPipeline(Governance) + Xai Learning ModelPipeline
 - = Xai ModelPipeline(Engine)
 - : L-TTEC(Learning-Training-Testing-Evaluation and Correction) System

Product and Service Overview

To build AI System

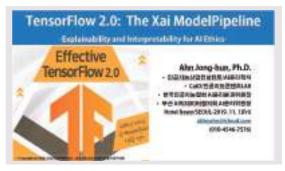
we develop DataPipeline and Learning ModelPipeline

- -Basic Approach and Design Principles: Alignment and Embedment)
- 1. EASD(Ethically Aligned System Design)-Alignment
- 2. EESD(Ethically Embedded System Design)-Embedment



- 2019.11.30. Google Developer Group DevFest 2019 Busan Speaker
- 2019.11.01. Open SW Development Center: Effective TensorFlow 2.0 Speaker
- 2019.07.19. Korea Al Expo 2019: The 1st Al Ethic + Education Forum Chair
- 2019.07.04. The 2nd Deep Learning Conference(DLCAT) Daejeon Speaker Korea Intelligence Information System Society(KIISS) Speaker(2018-2019)









Business Model	s Model The Explainable Al Governance System)					
Target	Expected 47 Difficil Dollars (Source, IDC, Worldwide Scrindifficial					
Market/Size Cognitive/Artificial Intelligence Systems Spending Guide)						
Customers	Customers On-going					
Future Plan						

- o Continue to study and introduce the Xai DataPipeline and Learning ModelPipeline
- o Co-work with other system development companies

Name	AlcontentsLAB	Establishment	In 2018	CEO	Ahn Jong-hoon
Contact	+82-10-4546-7576	E-mail	abbyahn@iclo	oud.com	
Main Business Field		Al System Development based on Al Ethics			
Main Product and Service Name		o Xai Governance System Development o Development and Design Principles : Alignment and Embedment 1. EASD(Ethically Aligned System Design)-Alignment 2. EESD(Ethically Embedded System Design)-Embedment			·Alignment ın)-Embedment
Investment history		Korea SMEs and Startups Agency(2018)			



AIMMO Co., Ltd.

www.aimmo.co.kr

Company Identity

AIMMO develops platforms and solutions that provide training data for artificial intelligence systems. AIMMO effectively refines various types of data, including images, videos, sounds, and texts to help artificial intelligence models train more accurately. By utilizing Web/Mobile collaborate crowds and inspections of experts, AIMMO provides training data in the fastest, and competitive conditions with AI assist function.

☐ Tech & Service Info

	■ Visual Int	elligence	■ Sound Intelligence		■ Language Intelligence	
Coro Al	☐ Data Drive	n / Modeling	■ Data Processing		☐ Hardware / Robotics	
Core Al	☐ Reinforcer	ment learning	■Autonomous driving		☐ AGI	
	☐ AEI		□XAI		☐ Etc	
Framework	AIMMO	IMMO Data type &		"Mobility", "Media Contents", "Security", "Robotics" (from custo		

Company's Core Al Explain

On top of general data processing abilities, AIMMO also possess Deep Learning based modeling capabilities to aid the processing of a wide range of data formats. Task allocation and management systems for efficient project management, data validation, and annotation are some of AIMMO's greatest assets. Also, we have developed "SQIP" which is our proprietary technology enabling autotmated annotation validation. Finally, AIMMO's deep learning-based annotation assistance models help enhance annotation speed and accuracy.

Product and Service Overview

AIMMO provides platforms and services best suited for any kinds of purposes and circumstances of the AI model. Its project oriented UI/UX, Annotation Tools, Worker Management, and Ai assist can furnish high-purity training data quickly, and easily. In the case of export prohibited data, solutions such as installed, and online access are available.

AIMMO GTaaS(Ground Truth as a Service)

• Machine learning data experts make Full-course design in GTaaS.

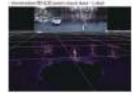
AIMMO-specific work and inspections solutions and worker management tools.

Solutions for sharing sensitive data securely for customer use.
 Providing action tools and management solutions for AIMMO GTaaS for customer use









- 2019.11.01. 1st prize winner of the Autonomous Driving Ancillary Technology Innovation Award during the 2019 Pangyo Autuonmous Motor Show
- 2019.11.01. 1st prize winner of the Preliminary Startup Investment Pitch during the Gyeonggi Autonomous Driving Center Investment Association Presentation





Business model	1) AIMMO GTaaS (Ground Truth as a Service) - A business that receives requirements from clients and process data sets directly from AIMMO to deliver them to clients. 2) AIMMO Enterprise On-Premise - Sells server-installed package solutions for clients with export prohibited data 3) AIMMO Enterprise Cloud - Sells solutions that combine on top of the cloud in a platform as a service (PaaS) format to enable clients to learn how to process their own data.
Target market	- Data processing market for domestic/international / \$3.16 million (worldwide, As of 2018) - Data processing platform market / N/A
Customers	Kakao, SSG, LX, SK telecom, BN Industry, Media Zen, Smart Radar System, VACE, Thor Drive, Scatter Lab, Spring Cloud, Spin A Web, CUBOX, Minds Lab, Big Pearl (Domestic)Phantom Al (International)

Future plan

- Platform commercialize for data annotation
 Establish new branches in America, Japan, China and Vietnam and work on global projects
 Build a platform for autonomous driving data

Name	AIMMO	Establishment	In 2016	C.E.O	Oh, Seung Taek
Phone	82+31-706-3533	E-mail	biz@aimmo.co.	kr	
Main Business Field		[Sales example] - Processing da - Processing da - Processing da - Processing da performance	ata for Al learning ata for Al learning ata for Al learning ata for Al learning ata for Al learning	on autono on Al Spe on Media to improve	
Main Product and Service		AIMMO			
Investment history		2 billion (angel investment)			



Al Platform

www.aiplatform.co.kr

Company Identity

Biometric-based security services and blockchain-based medical artificial intelligence platform enterprises.

□ Tech & Service Info

Core Al	☐ Vis	ual Intelligence	Sound Intelligence		■ Language Intelligence
	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics
Core Ai	Rei	Reinforcement learning		onomous driving	☐ AGI
	☐ AE		□XAI		☐ Etc
Framework				D 1 1 0	Self-assurance from
		MobileNet / ResNe			Pusan National
				secure	University Hospital

Company's Core Al Explain

Medical Imaging Analysis / Voice Synthesis / Face-synthesis

Product and Service Overview

Early Diagnosis of Dementia by Artificial Intelligence Retinal Image Analysis









- Al-Tech certification
- 4 patent applications
- Winning K-startup contest

Business model	HW Combined Dementia Units / Blockchain-based Healthcare Information Sharing Platform Services				
Target market	Early Diagnosis Market for Dementia / Entering the Medical Data Exchange				
Customers National Selling and Security Center / Global Medical Data Exchange					
Future plan					

As a medical data company, we will lead the world market as a medical artificial intelligence technology company by applying artificial intelligence technology to the medical industry.

Name	Al Platform	Establishment	In 2017	C.E.O	Andrew Shin		
Phone	Phone +82 51-783-9998		aiplatform@naver.com				
Main Business Field		Medical imaging/medical data/biometric security solution					
Main Product and Service		Development of an Early Dementia Device through Artificial Intelligence Retinal Image Analysis / Blockchain-Based Medical Information Sharing Platform Service					
Investment history		Korea Credit Guarantee Fund 300 million won / 200 million won in individual investors					



Al Studio

www.aistudio.co.kr

Company	Identity
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Al Studio is a vision Al company, develops and services unmanned retail products. Al Studio has technologies for recognizing personal information and non-identification.

☐ Tech & Service Info

	■ Vis	ual Intelligence	☐ Sound Intelligence		☐ Language Intelligence	
Comp. Al	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
Core Al	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI	
	□ AEI		■ XAI		□ Etc	
Framework		TensorFlow, pytor	ch	Data type & secure	image (self)	
Company's Core Al Eveloin						

Company's Core Al Explain

A technology that automatically learns the training data to be processed in a multi-network and reports optimal results

Product and Service Overview

- 1. Optimal Balance reporting to improve the performance of recognizing unstructured objects
- 2. Unmanned retail product development / service
- 3. De-identification of personal information using unstructured object recognition technology

Product and Service Image

Ancco Premium (Kiosk: table type)

Ancco Standard (POS linkage type)

- -2019.10.28. [Bread & co] Learning bread for a trial service
- -2019.09.18. [Bread & co] Store trial service preparation
- -2019.07.18. Participated in AI EXPO KOREA
- -2019.07.11. Wework Kiosk Experience Event









Business model	Al technology reporting / consulting, solution sales, product sales
Tananat manulant	- Sell unmanned retail products to overseas markets.
Target market	- Sell balance technology to companies with AI businesses.
Customers	Bread&co (Korea) & Bakery

Future plan

- 1. Implement a system that automatically learns and reports performance of processed learning data by iteration and multi-network
- 2. Pilot service and commercialization of unmanned retail products

Name	Al Studio	Establishment In 2019 C.E.O		C.E.O	Sungun Noh	
Phone +82 70-4411-8270		E-mail	siren@aistudi	o.co.kr		
Main Busi	ness Field	R & D in Vision AI / Unmanned Retail Product Development & Service /personal information non-identification technology				
Main Prod	duct and Service	Ancco				
Investmen	t history	N/A				



AIZEN Global

www.aizenglobal.com

Company Identity

AIZEN is redesigning digital banking with ABACUS, a massive-scale Machine Learning Automation Platform(AutoML) specialized in Banking, Payment, Insurance and Asset Management. ABACUS is a core AI 'Logic Chip' that integrates and converts cross-industry data into value-adding 'Credit' information in Finance.

□ Tech & Service Info

Carra Al	☐ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence
	■ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics
Core Al	■ Reinforcement learning		☐ Autonomous driving		■ AGI
	□ AEI		■ XAI		□ Etc
Framework		scikit-learn, tensorflow		Data type &	Data from Financial Institutions &
		pytorch, h2o		secure	Cross-industry Data

Company's Core Al Technology

- Automates the full end-to-end modeling process from Data Collection, Pre- processing, Feature Engineering, Model Training, Validation to Real-time Prediction
- Even people without Al expertise can easily build, monitor, deploy and update thousands of predictive models with just a few clicks
- Supports classification, regression, clustering, recommendation, ensemble algorithms, and allows users to monitor and validate the optimal model performance in real-time using a single Gallery view (Dynamic Multi-model Control Deck)

Product and Service Overview

- Architecture specialized in the massive-scale data processing
- Easy functional expansion with modularized components
- Massive multi-model validation & real-time deployment
- Explainable AI(XAI) with human-interpretable models
- Seamless integration with the legacy system



- 2019.09.25. Korea's Ministry of Financial Services Commission(FSC) Award
- 2019.06.18. Korea Chamber of Commerce and Industry
 2018.11.01. Hong Kong Fintech Week 2018 Fast Track Demo 1st Place
 2017.05.24. Korea's Ministry of Science, ICT and Future Planning Award









Business model	ABACUS AI Solution (Software-as-a-Service) AI Banking-as-a-Service (% of loans origination)
Target market	Global Financial Institutions(Bank, Credit Card, Insurance, Asset Mgmt.) and Data-rich Companies(Telecom, e-commerce, e-wallet, etc.)
Customers	Woori Bank, Woori Card

Future plan

- Export ABACUS technology and AI business applications to global financial institutions in Asia, expand into health care and public sector using the same framework
- Provide modularized financial services targeting unbanked and underbanked customers in the Southeast Asian market where credit card penetration is low

Name	AIZEN Global	Establishment	In 2016	C.E.O	Jung Seok Kang	
Phone	+82 70-7008-0020	E-mail	contact@ai	zen.co		
Main Bus	iness Field	 Al decision-making solution across the core value chain in Banking, Retail Payment, Insurance, and Asset Mgmt. Modularized banking services along with data-rich companies like telecom and e-commerce 				
Main Product and Service		ABACUS				
Investment history		Series A from Wooribank, Hong Kong Asset Mgmt., VC (2018)				



Alchera Inc

www.alcherainc.com

Company Identity

Al-based image recognition software provider to improve the safety and convenience of society.

□ Tech & Service Info

Core Al Visual Intelligence Data Driven / Modeling Reinforcement learning AEI		☐ Sound Intelligence ☐ Data Processing ☐ Autonomous driving ☐ XAI		☐ Language Intelligence ☐ Hardware / Robotics ☐ AGI ☐ Etc	
Framewo	rk	Lerning: Pytorch,Tensorflow Inference & publis Self development framework		Data type & secure	Company has it's own platform to Al data gathering.

Company's Core Al Explain

Spatio-temporal deep learning technology, image data synthesyzing technology for abnormal situations, deep learning speed technology.

Product and Service Overview

Real-time Face Recognition Solution, Visual Anomaly Detection Solution.

Product and Service Image

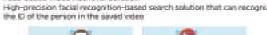
- Real-time Face Recognition Solution High-speed, high-precision facial recognition solution for ID recognition
- · Real-time smoke and fire detection solution. High-speed detection of early fires and early wildfires.







+ Face-based Video Retrieval Solution High-precision facial recognition-based search solution that can recognize the ID of the person in the saved rotes



 Real-time facility management solution, A solution for detecting and predicting anomalies in facilities to prevent enomious damage.



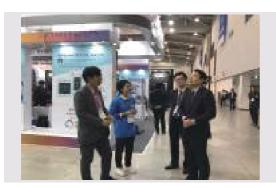




- 2018 HCI KOREA Conference Grand prize
- 2018 AI EXPO KOREA-Technology Grand prize
- 2019 Ministy of Science and ICT(MIST) Minister prize









Business model	License, SaaS			
	We are aim to targeting Fintech and the abnormal situation			
	detection market. The size is 135 trillion won, exceeding the CAGR			
Target market	of 33.9%. Alcera's technology is expected to be installed in 45			
	billion cameras worldwide, resulting in safety and cost savings for			
	many.			
	Korea : Samsung Electronics, SKT, LGU+, LGCNS, KT, NAVER, SNOW			
Customers	Camera, POSCO, KETI, Hansol, KEPCO, CGV, etc.			
	USA : ALERTWildFire, PG&E			
Future plan				

Starting from pioneering the US market, we will expand our business to global markets.

Name	;	Alchera Inc	Establishment	In 2016	C.E.O	Jung-bae Kim
Phone +82 070-4681-0172		E-mail	alchera@alcherainc.com			
Main Business Field		(Fintech/Safety & Contruction / Energy & Utility				
Main Product and Service		Face Recogntion, VADT(Visual Anomaly Detection Technology)				
Investment history		SNOW camera, Intervest				



ALI Co.,Ltd.

www.neoali.com

Company Identity

ALI is a company with deep-learning technology that processes natural language and provides a summarization service based on artificial intelligence.

- Summary service: deep learning techniques, generate responses through contextual understanding
- contextual summary technology of understanding context, emotion and intent
- Calibration Technique on Speech-to-Text

☐ Tech & Service Info

Core Al	■ Visual Intelligence		Sound Intelligence	■ Language Intelligence
	☐ Data Driven / Modeling		☐ Data Processing	☐ Hardware / Robotics
	☐ Reinforcement learning		☐ Autonomous driving	☐ AGI
	■ AEI		□XAI	☐ Etc
Framework		Tensorflow, Caffe, pyTorch	Data type & secure	CNN / Daily mail, Korean News Title "Dataset" and "Self-production"

Company's Core Al Explain

Summarization tech.

Most of the summarization solutions are currently based on extraction such as TF-IDF, Text Rank, etc. The extractive text summarization technique involves pulling key phrases from the source document and combining them to make a summary. The extraction is made according to a defined metric without making any changes to the texts. However, these summaries are far from human generated summaries and lack grammatical consistencies.

Our abstractive summarization technique entails paraphrasing and shortening parts of the source document. Our solution creates new phrases and sentences that relay the most useful information from the original input text by understanding the entire content first, just as humans do. With the help of the deep learning models, our solution can overcome the grammar inconsistencies of the extractive methods.

Product and Service Overview

Online-Offline (abstractive) Summary service

- Providing service in conversation with chat-bot, monologue, dialogue
- Recording conversation and analyzing context, intention, emotion
- Determining what the required services and when to serve to user
- Summarizing the entire transcript and saving

Product and Service Image



Summary service at homepage (http://www.neoali.com)

Summary tech. -CNN/Daily mail dataset, -Korean news title extraction (2015.01~2019.01) Chat-bot tech -Daily dialogue dataset -secure itself dataset (travel scenario, drama script, movie script)

- 2019. 10. 18 10. 21 Hong kong Startup Launchpad 2019
- 2019. 10. 30 11. 1 Asian Enterprizeship Awards 2019









Business model	License, SaaS
Target market	 Online Offline (Abstractive) meeting Summary service Simple text and dialogue summaries from mobile and wearable devices in meeting The market for wearable devices is \$46 billion in 2016 and is expected to grow to \$140 billion by 2026 As life logging grows and data volumes increase, we expect demand for our own summary technology, which can be selected for special information.
Customers	N/A

Future plan

- ALI's summary solution are currently in agreement with large companies in Korea on the use of the service
- In February 2020, APIs for the service will be provided through its own cloud server.
- The solution can now be tested via the web server and will be available through the app version from January 2020.
- -By the second half of 2020, the app version is expected to reach over 10,000 users and will be upgraded to reflect user feedback.
- Extending to a summary service with added photos and videos in the future.

Name	ALI Co.,Ltd.	Establishment	In 2019	C.E.O	Minho Lee
Phone	+82 53-950-6436	E-mail	mholee@gmail.com		
Main Business Field		Discussion summary, Lecture summary, Dialogue in call center summary, Pro-active chat-bot service			
Main Product and Service		Sum-Note, Alice(pro-active chat-bot service)			
Investmen	t history	N/A			



Alliance Korea

www.gosudle.com

	Co	m	pa	nv	Ide	ntity
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Alliance Korea is an enterprise of providing a knowledge-sharing service based on big data and artificial intelligence. We help individuals and enterprises efficiently solve difficult issues. We seek to bring a mutually-beneficial business to a real world that benefits all people. This innovative business model creates a synergy effect and maximizes a business efficiency and effectiveness through an economy of sharing of highly-efficent people and knowledge.

☐ Tech & Service Info

Core Al	☐ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
	■ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
	■ Reinforcement learning		☐ Autonomous driving		□ AGI	
	□ AEI		□XAI		☐ Etc	
_		SKCP		Data type &		
Framewo	rk	(Smart Knowledge Collaboration Platform)		secure	Data itself	

Company's Core Al Explain

Al based recommendation system AiRS (Al Recommender System) utilization Accurate and sophisticated recommendations to users (Knowledge, Experts, News, Videos, etc

Architecture of a Search Engine / Use Google Assistant

Product and Service Overview

A platform based on big data and artificial intelligence of automatically matching customers with experts.

A solution based on big data and artificial intelligence of providing specific information for solving problems such as examinations, diagnosis, and prescription.











Business model	With our knowledge-sharing platform, individuals and enterprises can have access to the information in their desperate need and address difficult challenges. We, Alliance Korea, recommend the most qualified expert to our valued customers and give them our experts' unique help in a face-to-face environment or an online environment. This service is provided via a face-to-face meeting, call over a video phone and telephone, social media, and email.				
Target market	Global service through Al-based knowledge sharing service platform				
Customers Expert 1: 1 matching consulting by individual and company					
Future plan					

Global service through Al-based knowledge sharing service platform.

- Global sharing of experts (domestic and overseas) talents by field

- Development of automated problem solving, diagnosis and prescription solution

- Deploying problem-solving blended learning O2O solutions.

- Customized knowledge learning and knowledge achievement assessment by specialty.

Develop a future forecast model

- Problem-solving professional information contents development

- Expanding the market for Al-based knowledge sharing platform and expanding overseas

Name	Alliance Korea	Establishment	In 2016	C.E.O	Jong Ki JUng
Phone +82 2-557-3071		E-mail	topjjk@naver.com	1	
Main Business Field		Sophisticated expert automatic matching based on big data and Al Problem (issue) Problem solving through automatic medical examination / diagnosis / prescription.			
Main Product and Service		Al-based Expert 1: 1 Knowledge Sharing Service Platform (SKCP: Smart Knowledge Collaboration Platform)			
Investment history		No investment			



Company Identity

APLY prepares AI services that make drones smarter and transform smart toys more emotionally.

☐ Tech & Service Info

	Visual Intelligence	☐ Sound Intelligence		☐ Language Intelligence	
Core Al	☐ Data Driven / Modeling	■ Data Processing		☐ Hardware / Robotics	
Core Ai	☐ Reinforcement learning	☐ Autonomous driving		☐ AGI	
] AEI	☐ XAI		☐ Etc	
Framework	TensorFlow, Keras	Data type	Photos of facilities taken with		
Framework	Tensorriow, Keras	& secure	drone camera		

Company's Core Al Explain

Anomaly detection and information recommendation for facility monitoring

Product and Service Overview

DKDK – Emotional service that simulates heart rhythm using smartphone's vibration function

- Send your heart rhythm to your friend

Dromi - One-touch facility monitoring service utilizing drones without complicated and difficult operation

- Fast and safe configuration and method













- 2018.12.26 Al communication devices and their operation methods (Patent Pending)
- 2019.04.25 Monitoring devices and methods (Patent Pending)
- 2019.04.25 Drone Control Devices and Method (Patent Pending)
- 2019.07.22 Drone Video Analysis Unit and Method (Patent Pending)
- 2019.07.22 Flight Plan Information Generation Devices and Methods (11 other patents pending)









Business model	HW Combination, Solution			
Target market	1. Facility monitoring market (approx. 4 trillion won)			
rarget market	2. Smart toy market (7.4 billion euros)			
Customers - Safety (Government) Industry - Content based business				
Future plan				

Dromi

- -Expansion of types and areas of monitoring facilities
- -Service model development using devices other than drones

DKDK

- -Development of ultra-small DKDK module that can be embedded in various products and devices
- -Continued development of fun and diverse contents that can be applied to the DKDK module

Name	APLY Inc.	Establishment	In 2018	C.E.O	Lee Gunwoo	
Phone +82-2-6956-0801		E-mail	contactus@aply.biz			
Main Business Field		Facility monitoring and service/production of IoT module for smart toys				
Main Product and Service		DROMI, DKDK				
Investment history		Ministry of SMEs and Startups, 2018				

ATLAS labs

Atlas Labs

www.atlaslabs.ai

Company	Identity
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Atlas Labs uses voice recognition and machine learning technology to develop and deliver language-based Al solutions using speech.

Because we developed Zeroth EE ourselves using Kaldi, we can provide deep domain adaptability and leading accuracy, which has been proven out over multiple deployments with some of the largest companies in Korea.

Tech & Service Info

	☐ Visual Intelligence	■ Sound Intelligence	■ Language Intelligence
Core Al	☐ Data Driven / Modeling	☐ Data Processing	☐ Hardware / Robotics
Core Ai	☐ Reinforcement learning	☐ Autonomous driving	□ AGI
	□ AEI	□XAI	☐ Etc
Frameworl	Kaldi speech recognition toolkit, Tensorflow	Data type & secure	Self-secured-voice and text Government public data access-voice and text

Company's Core Al Explain

We've built the leading Korean language STT engine using Kaldi, a leading open source framework for speech recognition. On top of Kaldi, we've incorporated the latest proven techniques and developed our own Korean-specific technologies for data preprocessing, audio segmentation, real-time domain adaptation, dynamic language modeling, and real-time processing, enabling us to provide leading performance for the B2B market.

Product and Service Overview

STT accuracy today is dependent on adapting the system to the user's data. In particular, B2B use cases often require adapting to domain or company-specific vocabulary and language.

Our STT platform, Zeroth EE, provides industry leading accuracy by enabling users to quickly and deeply adapt our speech and language models to their own data. Our self-serve system enables companies to do this on their own and on a regular basis, without any waiting period or extra development work from us. This is especially important in domains where vocabulary can change frequently, such as a list of seasonal product names.

Our system is flexible—it can be deployed on-premise, used as a cloud-based pay-as-you-go service, or embedded in an Android device.

Product and Service Image



ZEROTH

- 1. 2018 Sorizava License Agreement for Korean Speech Recognition Engine
- 2. 2018 POSCO ICT PoC contract for open source voice recognition performance verification
- 3. 2018 POSCO ICT Korean voice recognition engine license agreement
- 4. 2018 Yes24 Mobile app voice recognition interface project
- 5. 2018 KT DS KT CS joint investment call center STT solution supply contract
- 6. 2019 KT Sky Life PoC contract for broadcasting subtitle system development
- 7. 2019 Saltlux Active learning / GUI solution supply contract









	For on-premise or on-device deployments, we license out our system on a
Business model	"per channel" basis. Added to this base licensing fee are service and
	maintenance costs. For our cloud service, we charge on a per minute basis.
	Our target markets include call centers, ecommerce companies (voice
Target market	ordering), smart factory and kiosks. We estimate the aggregate market to
	be over 1000억
Customers	POSCO ICT, KT dS, Yes24, Skylife, Sorizava, Saltlux, Air Force, ETRI

Future plan

We will continue to build out Zeroth EE to make it more robust. We are also developing a TTS solution to provide our customers with an end-to-end audio management solution. With our partners, we will continue to focus our efforts on call center, voice commerce, and embedded devices.

Name	Atlas Labs	Establishment	In 2016	C.E.O	Robin Lyu
Phone	+82 70-8672-2621	E-mail	support@atlaslab	s.ai	
Main Busi	iness Field	Speech to Text	Solution (STT)		
Main Product and Service		Zeroth Enterpris	e Edition		
Investment history		SaltLux, 2019 Angel investors	(USA, Singapore,	Korea), 2	2015 - 2018



BAIKAL AI. Inc

www.baikal.ai

Company Identity

As a company specializing in AI, we are developing artificial intelligence and human-centered artificial intelligence technologies with humans. It provides a variety of solutions, including the development of artificial intelligence algorithms in the medical field, focusing on language.

□ Tech & Service Info

■ Visual Intelligence □ Data Driven / Modeling		ual Intelligence	☐ Sound Intelligence		☐ Language Intelligence
		■ Data Processing		☐ Hardware / Robotics	
Core Ai	Reinforcement learning		☐ Autonomous	driving	☐ AGI
☐ AEI			□ XAI		□ Etc
Framework TensorFlow v2.0		Data type & secure	of Korean	orpus(National Institute Language), NIA operate iihub.go.kr)	

Company's Core Al Explain

We have an AI conversation platform(BAIKAL.AI platform) that is 100% compatible with Google Assistant. It supports a variety of interfaces, including telephones. In addition, we have a goal-oriented dialogue and text-based question and answer engine through a 100% deep learning-based natural language processing engine. we are developing Baikal DVD(Deep Voice Detector) which can detect early-stage dementia through a verbal features.

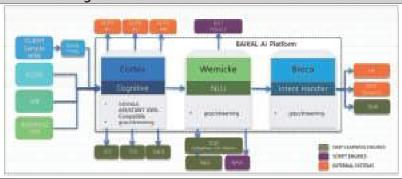
Product and Service Overview

BAIKAL AI Conversational PLATFORM

BAIKAL NLP : Al Engine for Korean Natural Language Processor

BAIKAL PTM: Bert Based Language Model for Korean

BAIKAL DVD(Deep Voice Detector)-Developing



- 2019 selected Startup package by Korea Institute of Start-up and Entrepreneurship Development





Business model	Saas, public Service
Target market	NLP Market in Korea 30m\$(2020'e) Text Mining market 400m\$, Dementia whole market in Korea 14B\$(2017), Market size of recognition dementia is 2B\$
Customers	Hana Bank(Korea)- Al Chatbot related solution

Future plan

Upgrading Korean NLP Engine,

Release commercial version for Al conversational Platform

Develop DVD(Deep voice Detector) and establish service Platform

Name	BAIKAL AI. Inc	Establishment	In 2019	C.E.O	Gihyun Yoon
Phone	+82 2-719-3103	E-mail master@baikal.ai			
Main Business Field		Korean NLP, Text Mining, Algorithm for healthcare			
Main Product and Service		Baikal NLP, Baikal conversational Platform			
Investment history		30,000USD(Angel Investor, 19') 60,000USD(Sakyejul, 19')			



BIGTREE

www.ibigtree.kr

Company Identity

"BIGTREE" consists of experts in big data, artificial intelligence and financial engineering, and develops and supplies big data analysis platforms and robot advisors to Pintech startups. RoboAdvisor "BIGBOT" developed for the spread of finance is registered with the investment platform and large financial company after passing the examination of the RoboAdvisor testbed supervised by the Financial Committee, the natural language analysis platform "BIGBOT LINGUIST" is It provides services to many large corporations and is recognized for its achievements. "BIGTREE" is a company that has been generating profits from research results since 2015. In order for technology to improve human life more efficiently, we are striving to develop technology under faith.

□ Tech & Service Info

	☐ Visual Intelligence	☐ Sound Intelligence		■ Language Intelligence
Core Al	■ Data Driven / Modeling □ Data Processing		ata Driven / Modeling 🔲 Data Processing 🖂 Hardware / Roboti	
Core Ai	Reinforcement learning	☐ Autonomous driving		☐ AGI
☐ AEI		□XAI		☐ Etc
Framework LSTM & CNN, BERT Data type & secure -External collection, crawling and purchase (self-secure)				

Company's Core Al Explain

- Trend prediction technology through feature extraction and learning on time series data
- Data labeling and learning technology according to customer's intention from VoC text data

Product and Service Overview

BIGBOT:

- RoboAdvisor service that AI predicts and analyzes the market by learning financial data for 20 years.
- Combining big data artificial intelligence with financial engineering technology to derive significant correlations from market data.
- Customers can perform portfolio composition, asset allocation and rebalancing based on the information provided by BIGBOT.

BIGBOT LINGUIST:

- A natural language analysis platform that extracts business insights from various customer opinions such as media, voice, and text. BIGBOT LINGUIST's sophisticated labeling
- analyzes various types of data based on quality, process and intent.
- Companies can design business solutions that meet customer requests based on BIGBOT LINGUIST analysis.





- 2016 Awarded KOSKOM Incubating and Fintech Service Competition
- 2016 Technology Guarantee Fund certified as a venture company
- 2016 Recognized as an affiliated research institute by the Ministry of Science, ICT and Future Planning
- 2017. Passed the Robo Advisor's Operational Review and System Review by the Financial Services Commission
- 2017. "TEMPIS Investment and Advisor" Robo Advisor Platform Supply Contract
- 2018. KB Securities, started Bigbot Robo Advisor service
- 2018. "Samsung Well Story" Big Data Platform Supply Contract
- 2019. "DUNAMU investment discretion" started Bigbot Robo Advisor service
- 2019. Received deep learning based speech recognition technology from Korea Electronics and Telecommunications Research Institute transfer
- 2019. "Doosan InfraCore" Concept-X Unmanned Fleet Control System Development





Business model	-B2B platform supply: RoboAdvisor platform supply to White Label with customers -B2C Asset management service: Provides asset management service to general customers	
Target market	-In 2021, it will be formed in a 6 trillion won market with an average annual growth rate of 50%	
Customers	 Financial Sector: TEMPIS Investment Advisor, KB Securities, DUNAMU investment discretion General Sector: Samsung WellStory, Samsung S-Core, Dong-A XPerts, Doosan InfraCore 	
Future plan		

Future plan

- -2019 ~ 2020: Domestic market settlement
- -2021 to 2022: Domestic market expansion and overseas market development
- -2022 ~: Overseas Market Expansion

Name	BIGTREE	Establishment	In 2015	C.E.O	Yim Hong-Soon
Phone	+82 10-2470-2030	E-mail	hongsoon.y	im@ibigt	ree.kr
Main Busi	iness Field	RoboAdviso	r / Natural L	anguage	Analysis Platform
Main Product and Service		BIGBOT / BIGBOT LINGUIST			
Investmen	nt history	Korea Credit Gu	iarantee Fund	d	



BIGVALUE

www.bigvalue.co.kr

Company Identity

Big Valve was established in 2015 with the aim of realizing real estate and financial innovation through big data and artificial intelligence. We've developed a system that automatically estimates real estate prices with big data and artificial intelligence technologies. Our clients include some of the major banks and financial institutions. We were selected as the designated representative of the Financial Services.

☐ Tech & Service Info

Core Al □ Data Driven / Modeling □ Data Processing □ Hardware / Robotics □ Reinforcement learning □ Autonomous driving □ AGI □ AEI □ XAI □ Etc Framework □ Developed by the company itself □ Data type & secure □ public data portals		■ Visual Intelligence	☐ Sound Intelligence	☐ Language Intelligence
Reinforcement learning Autonomous driving AGI AEI XAI Etc	Coro Al	■ Data Driven / Modeling	■ Data Processing	☐ Hardware / Robotics
	Core Ai	☐ Reinforcement learning	☐ Autonomous driving	☐ AGI
Framework Developed by the company itself Data type & secure public data portals		□ AEI	□XAI	☐ Etc
	Framework	Developed by the compar	ny itself	cure public data portals

Company's Core Al Explain

Big Value has five Korean patents.

- 1) the real estate market price estimating system and the method using big data
- 2) the real estate market price estimating apparatus and the method using the real transaction price and official price
- 3) real estate market clustering method and apparatus thereof, and the real estate market price estimation system and the method using the same
- 4) System of real estate prices and methods using of the Case of real estate transactions determined based on similarity scores
- 5) location based big data system

Product and Service Overview

<Product>

- 1) Villa price data
- 2) Real Estate Spatial Information Solutions
- 3) A new building simulator
- 4) An industrial estate & factory price data

<Service>

- 1) 빌라시세닷컴(villasise.com)
- Address-based coalition multi-generation market price inquiry service providing coalition/multi-generation housing prices
- 2) 로빅(lobig.co.kr)
 - B2B Corporate transfer only price Inquiry Platform

Product and Service Image



Commission, three times. We signed a contract with Hana Bank, the primary partner company. It is the first company among companies selected as the designated representative to perform major business activities of a commercial bank







- Second selection of designated agents of the Financial Services Commission (Shinhan Bank) 2019
- DNA 100 Innovative Companies Selected by the Information Society Agency2019
- Selected by Ministry of Science, Technology, Information and Communication 'Real Estate Big Data Center', 2019
- > Third selection of designated agents of the Financial Services Commission2019
- > 2019 Consignment contract settlement with Hanabank ,2019

Business model	Development and Supply of Real Estate Automated Estimation System Using	
business model	Big Data and Artificial Intelligence	
	Big Value is currently supplying Big Value's Automated Valuation Model	
Target market	solutions to banks and financial institutions, and plans to deliver them to	
Target market	public institutions and construction companies in the future. In the long run,	
	the goal is to build a real estate asset management platform	
	Hana Bank, Shinhan Bank, Shinhan Life Insurance Co, Busan Bank, Daegu	
Customers	Bank, Honest Fund, bank salad	
	Korea Data Industry Promotion Agency, Refine, Spacewalk	
Future plan		

Future plan

In the short term, the goal is to become a company with automatic asset value calculation technology for all areas of real estate, and in the long term, to build a real estate asset management platform led by "Bigvalue."

Name	Bigvalue	Establishment	In 2014	C.E.O	JINKYEONG KIM
Phone	+82 2-779-9365	E-mail	info@bigvalue.co.kr		
Main Business Field		Real estate bigdata system & Al			
Main Product and Service A\		AVM(Automated Valuation Model)			
Investment history		Nondisclosure			



BluePrintLab Inc.

www.blueprint-lab.com

Company Identity

BluePrintLab is the startup using Al and AR technology. We get 2D image data and 3D mesh data from user's face and provide reprocessed data or solution that enterprise company is able to use easily.

□ Tech & Service Info

	■ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence
C A1	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics
Core Al	■ Reinforcement learning		☐ Autonomous driving		■AGI
	□ AEI		□ XAI		☐ Etc
Framework		TensorFlow		Data type &	Face 2D image, 3D
riailiewo	TK	rensorriow		secure	mesh data
Company's Core Al Explain					

- Providing recommendation algorithm for individual preference based on user's face data
- 3D reconstruction from 2D image to 3D data

Product and Service Overview

- Users are able to use their smartphone to scan their face then we recommend eyewear based on user's face data. Also, users can do virtual try-on with recommended eyewear so that they get to know which eyewear fits on their face







- 2019.01.01. Team members
- 2019.02.26. Providing face recognition and virtual try-on technology to McLaren
- 2019.06.12. Participation for president Moon's oficial visit to Finland
- 2019.07.26. Sellected by TIPS









Business model	License + Subscription			
Target market	Marketing and Al budget of eyewear companies/\$40.4B			
Customers	HotSunglass(KR), Blink(KR), McLaren(UK), L'amy(FR), MASQ(US),			
	Hyphen(US)			
Future plan				

We have plan to expand our business into beauty, estimation of plastic surgery, biometric authentication

Name	BluePrintLab Inc.	Establishment	In 2017	C.E.O	Seungsik Shin	
Phone	+82 70-7526-6897	E-mail	charlie@blue	print-lab.	com	
Main Business Field		Al, AR, E-commerce, Fashion				
Main Product and Service		V2, Virtual fitting service with face recognition				
Investment history		Hanyang University Holdings, Shinhan Finance Group				



BlueSignal Corporartion

www.bluesignal.co.kr

Company Identity

BlueSignal's traffic prediction will become an essential technology until the global transportation system reaches a complete autonomous environment. This prediction technology will interact with traffic signal systems and on-road automobiles, it is evaluated to be highly effective for improving the prediction of transportation accuracy and traffic flow. BlueSignal is currently executing collaborative tests with several leading automobile manufacturers in order to implement the state-of-art traffic prediction system.

Tech & Service Info

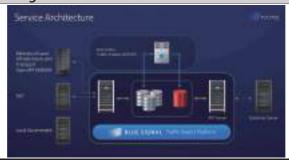
Cour Al	☐ Visual Intelligence		☐ Sound Intelligence		■ Language Intelligence
	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics
Core Al	☐ Reinforcement learning		■ Autonomous driving		□ AGI
	□ AEI		☐ XAI		☐ Etc
Framework Self		Da	ata type & secure	Hi	storical Traffic Data

Company's Core Al Explain

The BlueSignal concept is an innovative and unique algorithm solution. BlueSignal Corporation's Adaptive Traffic Management Technology

Product and Service Overview

- (1) Predict traffic conditions from two hours to six hours in the future,
- (2) Control traffic signals to improve the flow of traffic.
- (3) Alert drivers of alternative routes that may save time and may be less congested with less risk of accidents. The data inputs for the solution come from existing traffic Big Data.



- Selected as Top7 startups for INFINITI LAB's Smart MobilityProgram (2017)
- Hong Kong Alibaba JUMPSTARTER 2019 Smart CityGlobal Top1
- Microsoft introducedBlueSignal Technology about 'Top3 Future Innovate Al Technology'







Business model	Technology License / Running Fee, System Integration, Mainterunce
business model	Fee
Target market	N/A
Customers	Auto, Logistic, Government

Future plan

Application Development by Industry (Government / Automobile / Logistics)
Smart City (Traffic) Implantation:AI-based Smart Traffic Lights
Commercialization of Smart MobilityApp for the public
Supply autonomous carprediction simulator.

Expand product development by industry(Insurance / Car Sharing / Emergency)
Positioning as Global TransportationSolution Company

Name	BlueSignal Corporartion	tion Establisment In 2015 C.E.O Baik Sen			
Phone +82-42-863-6136		E-mail	red3922@bluesignal.co.kr		
Main Business Field		Al based Traffic Prediction Service			
Main Product and Service		Predict traffic conditions from two hours to six hours in the future,			hours to six
Investment history		N/A			



enTrust Angles Co.

https://entrusta.ai

Company Identity

Our mission is to let you be free from financial burden. Current retail banks or financial institutions is very complex and difficult to use unless you are a financial expert, and it is not easy for many of you to integrate into their system while living your own life - work, love, vacation, eat, raising children and taking care of life itself.

□ Tech & Service Info

	☐ Visual Intelligence	☐ Sound Intelligence	■ Language Intelligence
Cove Al	■ Data Driven / Modeling	■ Data Processing	☐ Hardware / Robotics
Core Al Reinforcement learning		☐ Autonomous driving	☐ AGI
	☐ AEI	□XAI	☐ Etc
Framework	TensorFlow, Keras etc	Data type & secure	Data type: supply, trade report, value, news Data secure: API collecting, data crawling

Company's Core Al Explain

- · HB+ collects financial big data and grouping without any human intervention,
- · With this financial big data, HB+ processes millions of Back-testing to find optimal investment strategy and create portfolio.
- HB+ analyzes past charts and forecasts predictive charts through CNN(Convolutional Neural Networks) algorithms,
- Based on predicted results, HB+ manages portfolio, asset allocation, investment by itself.
- · HB+ makes rebalancing frequently through real-time monitoring.

Product and Service Overview

Our product called HB+ is an AI wealth management platform with machine-learning technology and big data analysis. It offers fully automated / auto-pilot investing service from setting up investment strategy & portfolio to analyzing market, to making actual trading based on your risk appetite or investment preference. The only action you need to do is to press cash-out button.



- 2019.06 New York family office funding challenge winner
- 2019.09 Participating RBS / NatWest FinTech accelerator program in U.K.
- 2019.09.19 Takeoff International Startup summit WINNER in ISTANBUL
- 2019.09.25 K-Pitch in Silicon Valley 3rd









Business model	A.I SaaS
Target market	Global financial advisory AUM is 79,200 BUSD. The goal is to achieve a total of 860 MUSD in revenue.
Customers	HNWI, Family Office etc

Future plan

- Phase 1 Investment specialized AI to lift people's everyday financial burden
- Phase 2 Line of Credit, Loan, and Mortgage optimization via Al, No more requirement to go through complicated process. Al will do it for you.
- Phase 3 Al Bank, 100% limitless and borderless. Your personalized Al Bank will take care of whatever financial requirements or issues you encounter anytime, anywhere.

Name	enTrust Angles Co.	Establishment	In 2019	C.E.O	Yong Guk, Hwang	
Phone	+82 505-290-2962	2 E-mail kim@entrusta.ai				
Main Business Field		SaaS				
Main Product and Service		HighBull Plus/H	lB+			
Investmen	t history	private				



BPU Holdings

www.bpuholdings.com

Company Identity

BPU Holdings, the pioneer of AEI is a global company, headquartered in Seoul, South Korea. BPU Holdings Mission is to generate the most advanced, usable, secure and innovative Artificial Emotional Intelligence technology in the world. As such, BPU has created the first Artificial Emotional Intelligent (AEI) platform — AEI Framework. AEI is a synthesis of Natural Language Processing (NLP), Machine Learning (ML) and Emotional Intelligence (EI). Al emulates how people think — AEI emulates how people feel.

☐ Tech & Service Info

Carra Al	■ Visual Intelligence		☐ Sound Intelligence	☐ Language Intelligence
	☐ Data Driven / Modeling		☐ Data Processing	☐ Hardware / Robotics
Core Al	☐ Reinforcement learning		☐ Autonomous driving	☐ AGI
	■ AEI		□XAI	☐ Etc
Framewo	rk	AEI Framework	Data type & secure	Image, Conversation set (internally prepared)

Company's Core Al Explain

BPU aims to advance the human condition with Artificial Emotional Intelligence (AEI). Not exclusive to Artificial Intelligence (AI), BPU Holdings encompasses both AI and AEI together to build an advanced technology for human kind. AEI's ability to allow cognitive sentiment as a tool for everyday use, enhances our personal and professional relationships both judiciously and empathetically. Furthermore, we will provide the social trend analytics service for trend monitoring and election prediction.

Product and Service Overview

Brand Reader :AEI based social media Marketing trend analysis platform

Zimgo Polling: AEI based election prediction solution

AEI Studio: Platform to design, test and host bots capable of rich and complex conversations.



- 2018 CIO Europe Top 20 companies (IT)
- 2018 Silicon Review Top50 companies(IT)
- 2019 Venture company certification
- 2019 KORAIA AI Biz certification



- 2019 CIO APAC Top 10 Companies(Cognitive recognition)
- 2019 NSF CAC IAB Board directing company
- 2019 Consumer Award(Chosun Ilbo host)







Business model	Platform business / partnership development		
Target market	Not fixed		
Customers	Industry research / Al research / Investor, Grants		
Future plan			
Provide AEI API	Provide AEI API / technology and building AEI based Eco-system		

Name	BPU Holdings	Establishment	In 2012	C.E.O	Carlos Art Nevarez	
Phone	Phone 82+2-548-9593		helpdesk@bpuholdings.com			
Main Business Field		AEI based platform business (Tehnology, API)				
Main Prod	duct and Service	Zimgo Brand Reader, Zimgo Polling, AEI studio				
Investmen	t history	KRW 60B(Type of Crowd funding, '16)				



www.buzzpole.com

Company Identity

Buzzpol developed Cerviray™, which can remotely read early cervical cancer screening using AI, and targets the Chinese and Southeast Asian markets with low resource setting.

□ Tech & Service Info

Core Al	■ Visual Intelligence			☐ Sound Intelligence		☐ Language Intelligence
	☐ Data Driven / Modeling			☐ Data Processing		☐ Hardware / Robotics
	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI	
	□ AEI			□XAI		☐ Etc
Framework		Tensorflow	Data	type & secure		ed IRB-approved cervical from partner Hospitals
Company's Core Al Explain						

Self-developed AI algorithm BuzzNet v1.0 specialized in the diagnosis of cervical cancer, unlike conventional black and white medical images, is optimized algorithm for lesion extraction and detection of full color medical images owned development.

Product and Service Overview

Cerviray is an A.I. based cervical cancer tele-screening system



- > Al System SW + Digital colposcope HW Set
- > VIA technique for morphological determination of cervical abnormalities
- 1. Cervical imaging and request at remote hospital (transfer to server)
- 2. The AI server proceed the first diagnosis (real time)
- 3. Final decision of professional reading doctor in urban area
- 4. Send the result report to the requested hospital (within 24 hours)
- 5. Al re-learn the final reading (improve accuracy)

- Certificate of K-Global 300 rising companies in 2015
- Winner of the MSIT minister commendation in 2017
- NTTDATA Open Innovation Contest finalist in 2019





Business model	Medical ICT
Target market	China market / CNY 28 Billion (USD 4 Billion)
Customers	- Ob/gyn hospital in low resource setting area - VIP women's clinic

Future plan

- -Certification progress: CE, KFDA,CFDA
- -China: Start of sales in China after CFDA approval through Beijing subsidiary (2020)
- -Started operations in other regions: Thailand, Singapore, Africa (2020)

Name	Buzzpole	Establishment	Jeong Jaehoon			
Phone +82 2 6497 8800 E-mail contact@buzzpole.com			า			
Main Business Field		Medical images analysis based on Al				
Main Product and Service		Cerviray Al				
Investment history		N/A				



Cartrader Co., Ltd.

www.zigcar.net

☐ Company Identity

ZIGCAR is a big data-based service that provides car information and auto financing for buyers and sellers when purchasing a car.

□ Tech & Service Info

	■ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence
Core Al	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics
	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI
	□ AEI		□ XAI		☐ Etc
Framework		Self		Data type &	Used Car and New Car
				secure	Transaction Data (Self)
Company's	Core	Al Explain			

Financial Non-Comparison Solutions and Data Collection and Processing

Product and Service Overview

Change the standard of auto trade









Business model	Transaction Fee		
Target market	Domestic Vehicles Transactions 60 trillion		
Customers	Customers B2C service, 100,000 downloads		
Future plan			

Achieve 1 trillion won in financial transactions by 2021.

Name	Cartrader Co., Ltd.	Establishment	In 2016	C.E.O	MinWoo Han		
Phone +82 1544-9847		E-mail help@zigcar.net					
Main Business Field		Car finance					
Main Pro	Main Product and Service		ZIGCAR				
Investment history		N/A					



ChoRock Soft

www.catchroad.com

Company Identity

ChoRock is a 'Big Data Deep Learning Application Specialist', a 'Data Technology' company with core competencies in the floating population, sports Big Data, and other areas. We have tried to apply Big Data-based Deep Learning in a variety of areas that have never been tried with Deep Learning, or where there are few cases.

☐ Tech & Service Info

Core Al	■ Visual Intelligence		☐ Sound Intelligence		■ Language Intelligence
	■ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics
	☐ Reinforcement learning		☐ Autonomous driving		■ AGI
	☐ AEI		□ XAI		☐ Etc
Framework		Tensorflow		Data type & secure	Self

Company's Core Al Explain

A technology that extracts data on characteristics of the floating population from images such as CCTV and combines them with information reflecting the needs of the user (consumer) to process them for significant use.

Product and Service Overview

Accurate and meaningful information on the floating population is provided for extracting data on the characteristics of the floating population in a variety of formats, including investment in commercial districts, development of stores, marketing strategies, and optimization of personnel placement.



- 2016.12.01 2016 Korea Inventions Patent Award Winning
- 2016.12.29 K-Global 300 (Ministry of Science, ICT and Future Planning Certificate)
- 2017.08.25 Accreditation of the Research Institute of Enterprises
- 2018.02.14 Confirmation, having won the venture firms









Business model	Hardware Combination, Software as a Service			
Target market	Leading company in the field of Floating population and Sports big data			
Customers	Customers Hyundai Engineering / Korea Railroad and etc.			
Future plan				

- 1. Build know-how through deep learning technology in various areas.
- 2. Securing data and building a deep learning model for developing its own solutions in the field of Floating population and Sports.

Name	ChoRock Soft	Establishment	In 2015	C.E.O	Kim Myung Rock	
Phone +82 02-534-2007		E-mail	kimss12@catchroad.com			
Main Business Field		population / sports / blueprints and etc.				
Main Product and Service		CPAS (CCTV Population Characteristic Extraction and Analysis System)				
Investment history		None				



☐ Company Identity

CNAI is a company that provides solutions and services utilizing AI technology based on voice recognition and natural language processing in communication and communication areas including contact centers.

☐ Tech & Service Info

	☐ Visual Intelligence	■ Sound Intelligence	■ Language Intelligence		
Como Al	■ Data Driven / Modeling	☐ Data Processing	☐ Hardware / Robotics		
Core Al	☐ Reinforcement learning	☐ Autonomous driving	☐ AGI		
	☐ AEI	□XAI	☐ Etc		
			voice, text corpus, and		
Framework	Tensorflow, PyTorch	Data type & secure	more(Self-made or		
			purchased)		
Company's Caro Al Evolain					

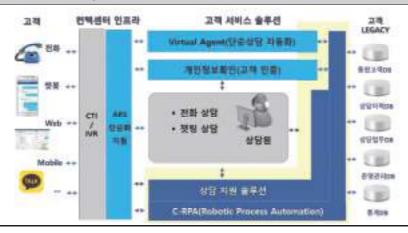
Company's Core Al Explain

Speech recognition, natural language processing, chatbot, RPA

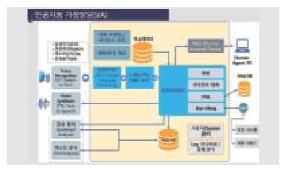
Product and Service Overview

Provides contact center solution using deep learning based voice recognition and natural language processing technology.

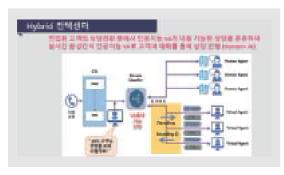
Using AI technology to increase efficiency through customer consultation information and task automation.



- 2019.04. Selected as a data supply company by KDATA
 2019.06. Selected as 'an excellent tenant of Seoul Yangjae R & D Innovation Hub









Business model	License of Al Contact Center Solution, SaaS			
	Hybrid contact center solution and service business based on			
Target market	artificial intelligence technology, 700 domestic contact centers,			
	number of employees: 420,000, market size: KRW 4.2 trillion			
Customers	Companies with contact centers such as finance, home shopping,			
Customers	and local governments			

Future plan

Advance AI contact center technology and solutions.
-On-PremiseBusinessforLargeBusinessandFinancialCompanyContactCenters
-CloudcontactcenterbusinessforSMEsandsmallbusiness

Name	CNAI	Establishment	In 2019	C.E.O	Kim, yongseok	
Phone	+82 2-866-7500	E-mail	nail yskim@cnai.kr			
Main Business Field		Contact center solutions				
Main Product and Service		such as voice chatbot, RPA		atural lanç	guage processing,	
Investmen	nt history	NA				



Codevision Inc

www.codevision.kr

	Company	Identity
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PT 9 O'clock is a fitness application that uses artificial intelligence developing by Codevision. With PT 9 O'clock , you can easily manage and record personal fitness record management.

☐ Tech & Service Info

Carra Al	Vis	■ Visual Intelligence		nd Intelligence	☐ Language Intelligence	
	☐ Dat	☐ Data Driven / Modeling		Processing	☐ Hardware / Robotics	
Core Al	☐ Rei	☐ Reinforcement learning		nomous driving	☐ AGI	
	□ AE	☐ AEI			☐ Etc	
Framew	ork	Tensorflow, pytorch		Data type &	skeleton image and	
Trainew	OIK			secure	video, self	

Company's Core Al Explain

We have the technology of image preprocessing, detection, recognition and prediction using artificial intelligence. And Code Vision possesses augmented reality and virtual reality production technology using Unity.

- Human, Skeleton, dog detection
- Face, body Recognition
- 3D Reconstruction
- AR, VR etc

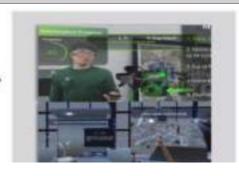
Product and Service Overview

Health Trainer Service using Al

PT 9 O'Clock is a service where artificial intelligence manages exercise (Suggestions, exercise recognition, incorrect posture notification)







< AR / VR >

Certificate of Minister of Education at the 2018 Promising Team 300 Competition Presidential Prize for Korea Youth Entrepreneurship Foundation 300 Demo Day 2018 Promising Team







Business model	HW Combination, License					
Target market	Target market					
Customers	Customers Rehabilitation therapy, Fitness center, Home training service					
Future plan						

PT9OClock improves artificial intelligence services to manage personal health and lifestyle as well.

Name	Codevision Inc	Establishment	In 2018	C.E.O	Eungyeol Song
Phone	+82 10-2600-6660	E-mail	help@codevision.kr		
Main Bus	iness Field	Al Image Processing and Developing			9
Main Pro	duct and Service	PT9OClock(AI), AR, VR Content			
Investmen	nt history	N/A			



ComTrue Technologies, Inc.

(中) 對馬里明日對黑刀

cometrue.ai

Company Identity

Comtrue Technologies owns a service (solution) that enables face protection (aiSee), non-face-to-face authentication (aidee), and artificial intelligence-assisted image privacy through the use of artificial intelligence technology.

☐ Tech & Service Info

Carra Al	■ Visual Intelligence		☐ Sound Intelligence		■ Language Intelligence	
	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics	
Core Al	☐ Reinforcement learning		☐ Autonomous driving		□ AGI	
	□ AEI		☐ XAI		☐ Etc	
Framework		Self	Data type	& secure	Image, image	e data (self-assurance)

Company's Core Al Explain

- Develop an artificial neural network engine and possess its own technology through learning.
- Locate and quickly locate a person's face/ object in photos and videos of various environments.
- Identify faces of different sizes and directions with fast speed and high accuracy
- Neural network learning and testing through a large number of Face Set (99.2% accuracy)
- Identify the position of the face in images taken (pictures) and images entered in real time.
- Use non-recognition classification and feature comparison additional algorithms for high accuracy, not one artificial neural network engine (technology)

Product and Service Overview

Artificial Intelligence Face Recognition'aiSee' - A service that recognizes faces only through IP camera interworking and compares and analyzes faces through information on the face. The IP camera installed at the main entrance of the company and the institution enables the use of security, marketing, and promotional activities through the face recognition of the customer. Non-disclosure authentication 'aiDee' - A service that enables self-identification and authentication using artificial intelligence face recognition and identification (classification, OCR) technology Can be used in various areas required for mandatory financial institutions and various certification activities.



-2019 Comtrue.ai Conference





Business model	-Provide annual licenses to cloud services (agreement services) -On-premise and private cloud offering -Standalone server deployment in separate appliance (H/W monolithic) format
Target market	-Data and AI economy estimated at 13.6 trillion to 16.3 trillion dollars in 2030Of the total, the face recognition (face recognition) market is estimated to reach \$6.49 billion by 2021Provides cloud platform services using artificial intelligence (face recognition, super-brain (KSB), non-face authentication, chatbot, image recognition, machine vision, etc.) -Broad support for services to be used by public institutions, businesses and individuals in various fields, including finance, security, logistics, distribution, services, manufacturing, and public.
Customers	[Face recognition] - NESIC (Japan) & Marketing, Public relations [Certificate of non-face identity] - Certify(Japan) & Accreditation test field - Finshot (Korea) & FinTech, Financial Sector

Future plan

- O Security (personal unmanned aerial vehicle system & abnormal behavior/ threat detection system)
- Install cameras in businesses, institutions and private homes to manage and prevent them from entering and leaving the premises.
- Automatic alerts for internal threat situations in conjunction with AI speakers and CCTVs
- O Marketing and promotion (store and enterprise internal data analysis)
- Face recognition and analysis of stores and floating population (store management and marketing)
- O Finance (KYC)
- To provide face recognition authentication for financial institutions (bank, securities, etc.) and cryptocurrency exchanges that have AML obligations

Name	ComTrue Technologies, Inc.	Establishment	In 1995	C.E.O	Norman Park	
Phone	+82-2-396-7005	E-mail	ask@comtrue.com			
Main Business Field		marketing, promotion, security service				
Main Pro	duct and Service	aiSee, aiDee				
Investment history		N/A				



Continuum Inc.

www.continuumai.co.kr

□ Comp	any Id	entity
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CONTINUUM Inc. do real-time Analysis of the Video Footage.

We provides a high performance Video Analysis library to all CCTV businesses.

We have our own core generic technology that enables us to execute research.

☐ Tech & Service Info

Core Al	■ Visual Intelligence			☐ Sound Intelligence		☐ Language Intelligence	
	☐ Data Driven / Modeling			☐ Data Processing		☐ Hardware / Robotics	
	☐ Reinforcement learning			☐ Autonomous driving		☐ AGI	
	□ AEI			□ XAI		☐ Etc	
Framework		Tensorflow	Dat	ta type & secure	_ ` _ ′	fire and smoke, ton, all kind of Car(self)	

Company's Core Al Explain

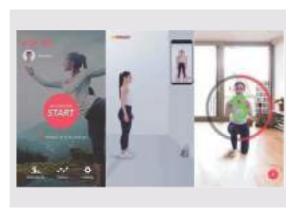
- 1) High recognition rate- High recognition speed
- -Application of differentiated technologies on each elements
- -Optimization and augmentation suitable for the features
- 2) Optimal implementation of behavioral recognition
- Behavioral recognition through time series and implementation of high functions
- Possession of the pose estimation technology that shows the fastest inference rates
- 3) Low spec smartphone. Jetson TX1.2 , Jetson Nano
- Applying the deep learning model and implementing performances on different low specification devices
- Secured the technology that can operate the model on any type of device

Product and Service Overview

COP V1.0 , 12PT







Business model	License, Subscription			
Target market	1) CCTV: - B2B market - Number of business: 6800 companies (domestic and foreign) -Market size in 2023: about 68 trillion won 2) Fitness -Workout app - Number of users: 350 million -1.8 trillion won market (Workout app only)			
Customers	Samsung Elec, LG CNS, HDC			
Future plan				

ruture plan

Active sales will provide room for the development department. Increase the maturity of your workout app and conduct valuable marketing.

Name	Continuum Inc.	Establishment	In 2016	C.E.O Jeong			
Phone 82+2-333-2133		E-mail	info@continuumai.co.kr				
Main Business Field		CCTV, Health Care					
Main Product and Service		COP V1.0					
Investment history		N/A					



Crevate

www.crevate.com

Company	/ Identity
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Crevate is an innovation consulting firm that delivers new and innovative products, services, UX, space concept and business model concepts. We have expertise in creating new ideas using artificial creativity based on AI.

☐ Tech & Service Info

Framework internal Da		ata type & secure Bus		iness Innovation Case			
	■ AEI			□XAI		■ Etc	
Core Al	☐ Reinforcement learning			☐ Autonomous driving		■ AGI	
	☐ Data Driven / Modeling			☐ Data Processing		☐ Hardware / Robotics	
	☐ Visual Intelligence			☐ Sound Intelligence		☐ Language Intelligence	

Company's Core Al Explain

The market for creative education enhancing one's creativity is growing exponentially as ingenuity is becoming a capability of talented people of future generations. Along with the creative education, the artificial creativity Al industry is also rapidly expanding; Al paints, writes poetry, and composes music. Combining creativity and Al, IdeaPingPong is developing a new field by utilizing Al to generate new ideas and augment user imagination. Once Al provides a seed idea by rearranging various information, the user can focus on developing cutting-edge thinking, carrying new concepts into effect.

Product and Service Overview

Mental stamina is just as important as daily physical exercise. IdeaPingPong is a Brain Fitness Chatbot that trains people's brains to enhance originality. IdeaPingPong automatically generates new ideas based on innovative cases through keywords entered and thus enriches new possibilities for industries seeking novel ideas. It is Al that produces ideas able to generate new concepts in various ways without any bias. Moreover, it also supports natural human resourcefulness, expanding one's thoughts.

Product and Service Image

This groundbreaking Al illustrates how to create original concepts utilizing users' suggestions. IdeaPingPong implements a conversational UI allowing anyone to easily utilize Al.







Business model	SaaS
	The market for creative education enhancing one's creativity is
	growing exponentially as ingenuity is becoming a capability of
	talented people of future generations. Along with the creative
	education, the artificial creativity AI industry is also rapidly
Tawash was what	expanding; AI paints, writes poetry, and composes music. Combining
Target market	creativity and AI, IdeaPingPong is developing a new field by
	utilizing AI to generate new ideas and augment user imagination.
	Once AI provides a seed idea by rearranging various information,
	the user can focus on developing cutting-edge thinking, carrying
	new concepts into effect.
Customers	B2C User

Future plan

Chatbot is suitable for voice UI and therefore Crevate will expand the consumer touchpoints by enabling IdeaPingPong to respond to voice through a speaker as well as typed texts. Crevate will pioneer a Brain Fitness market with its own online innovation tools such as IdeaPingPong and Idea Opener(www.ideaopner.com).

Name	Crevate	Establishment	c.E.O Sung		Sung Youn Pak	
Phone	+82 2 -6403-6482	E-mail	crevate@crevate.com			
Main Business Field		Consulting, Education, Workshop				
Main Product and Service		Ideapingpong				
Investment history		0				



Crowdworks,Inc

https://www.crowdworks.kr/

☐ Company Identity

Crowdworks organises the largest data platform collecting and annotating data for machine learning at first in Korea. We provide training data with high-speed and quality for AI service companies.

□ Tech & Service Info

	☐ Visual Intelligence			ound Intelligence	☐ Language Intelligence	
Cono Al	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics	
Core Ai	Core Al		□А	utonomous driving	□ AGI	
	☐ AEI		□ XAI		■ Etc	
Framework	N/A	Data type secure	&	_	system for generating ing image, text, voice	

Company's Core Al Explain

- Generate various types of data with rapid speed using the largest crowdsourcing platform
- Organise first online crowdsourcing platform with total inspection system, guaranteeing 99.9% confidence level.
- Cover the data of all industries including automatic driving, healthcare, OCR, Al speaker, chatbot, AR, education, law, marketing and others.

Product and Service Overview

- Collect and annotate training data using the online crowdsourcing platform
- Generate a huge amount of data with high speed from the largest number of the workers in Korea
- Workers can earn more points when participating in more projects and clients receive desired training data from them



- 2019. 5 Selected as First penguin Enterprise by Korea Technology Flnance Corporation
- 2019.11 Possess 34 Applicated Patents Technology (Registered Patents: 5, Domestic Application: 22, Overseas Application: 7)





Business model	Platform industry
Target market	-Training data market/ Almost 4.3 billion USD
Target market	-Platform market at gig economy
	83 companies including enterprises, SMBs, public institutions, IT Start-ups
Customers	- Naver, Kakao(portal) Line(messenger) Hyundaicard(finance) LG
	CNS(Internet service) Posco ICT(IT service) SK telecom(correspondence)

Future plan

- Hit Sales revenue 8 million USD by 2020
- Produce 6,000 well-educated workers annually
- Apply for 100 patents and register 80 patents and by 2020
- Create worker recommendation and matching system

Name	Crowdworks, Inc.	Establishment	In 2017	C.E.O	Minu Park		
Phone	+82 2-6954-2960	E-mail	contact@crowdworks.kr				
Main Business Field		Generation of	training data for Al				
Main Duadwat and Camina		- Collect and a	annotate Al training o	data			
Main Pro	Main Product and Service		ine crowdsourcing da	ta platfo	rm		
		8.6 million USD	8.6 million USD (Korea Investment Partners and 7 others, '19)				
		1.3 million dollar (Korea Credit Guarantee Fund, '19)					
		595 thousand USD (BA Partners, '18)					
l		850 thousand USD (DSC Investment, '18)					
Investmen	it history	425 thousand USD (TIPS Program, '18)					
		85 thousand USD (Korea Technology Finance Corporation, '18)					
		119 thousand USD (Infobank, '18)					
		170 thousand USD (Naver, '17)					



https://csidelab.com

Company Identity

C.SIDE LAB, an artificial intelligence company has AI technologies such as Speech Rec ognition, Natural Language Processing, and Blockchain Security Solution based on Dee p Learning technology through constant Korea-Japan joint research. It provides smart t echnologies that can grow together from the introduction to operation of the optimiz ed AI technology in various industries.

☐ Tech & Service Info

Carra Al	■ Vis	ual Intelligence		■ Sound Intelligence	■ Language Intelligence
	■ Data Driven / Modeling			■ Data Processing	☐ Hardware / Robotics
Core Al	☐ Rei	☐ Reinforcement learning		☐ Autonomous driving ☐ AGI	
	☐ AEI		□XAI	☐ Etc	
Framework		not public		Data type & secure	by domain Partnership

Company's Core Al Explain

- -C.Side's Artificial Intelligence Manager, C.VIEW, is a solution that automatically recognizes and analyzes conversations shared by SNS, messenger, and e-mail, and shows the tasks that need to be done.
- Because of the deep learning artificial intelligence technology, the more accurate the data accumulates, the better the accessibility and drive-based maps are for NVIDIA's GPU-accelerated computing.

Product and Service Overview

This is a supporting solution of saving patient record occurred during the medical care via STT (Speech to Text) process to prevent medical disputes and protect the rights of medical staff and patients. (Speech Recognition, Natural Language Processing, Automatic Scheduling)





- -NVIDIA gtcx
- -Softbank Big Data Utilization Company Optimization
- -Lotte R & D (Recruitment AI, Retail AI)
- -Established a large domestic company, home shopping, artificial intelligence, counseling
- -Development of Underpin & Facebook Blockchain Platform Joint Collaboration
- -C.View-Medical Launching
- -C.View Insight Insight Launch









Business model	SaaS, Licence			
Target market	Korea, Japan / 90 million			
Customers	Not Public			
Future plan				

Related Market Status A doctor in a general hospital treats an average of 150 to 200 patients per day. Poor medical condition, Frequent medical disputes and accidents

Name	CSIDE Korea Inc	Establishment	In 2016	C.E.O	Jin Yeon Jung	
Phone +82 2-338-9395 E-mail		E-mail	master@cside.	co.kr		
Main Business Field		Artificial Intelligence Counseling (Big Data / Natural Language Processing / Image Processing)				
Main Product and Service		C.VIEW				
Investment history		Angel Invest				



danbee Inc.

danbee.ai

Company	Identity
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Conversational User Experience is for everyone. We offer a great tool for creating and operating conversational services such as chatbot or virtual assistant.

□ Tech & Service Info

	☐ Visual Intelligence			☐ Sound Intelligence		Language Intelligence
Core Al		Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics
Core Ai	☐ Reinforcement learning		☐ Autonomous driving		□ AGI	
	□ AEI		□XAI		■ Etc (chatbot)	
Framework danbee.Ai Data		a type & secure		rsation Language Data generation, self)		
Company's Core Al Explain						

Company's Core Al Explain

Natural Language Processing, Intent Classification, Entity Extraction, Emotional analysis, Dialogue Management, Correction of Conversation Flow

Product and Service Overview

danbee.Ai provides full functionality in cloud for creating Conversational services, such as chatbots or virtual assistants. Even a small team with less than three members can open and operate a chatbot service by themselves. (includes NLU, Dialogue Management, chat log management, channel connection function, API linkage function, test/debug tool, learning recommendation, etc.)

Product and Service Image

"챗봇을 키우기 위한 모든 기능을 클라우드로"







- 3 patent applications





Business model	SaaS
Target market	Korean Chatbot Market / \$128M
Customers	NH Bank, NH Capital, BCM, Gwacheon National Science Museum
	Future plan

Future plan

We want to create an ecosystem where small organizations can create conversational services such as chatbot and virtual assistant at a lower cost, allowing more people to experience interactive interfaces.

Name	danbee Inc.	Establishment	In 2018	C.E.O	Raphael Moonkil Seo	
Phone	+82 2-2088-8018	E-mail contact@danbee.ai				
Main Bus	iness Field	Cloud Software				
Main Pro	duct and Service	danbee.Ai				
Investmer	nt history	Private (LG CNS, '18)				



Data & Annalysis Co., Ltd.

www.roboadvisor.co.kr / www.dna.uno / www.fasst.co

Company Identity

Data&Analistics is a RoboAdvisor company that uses big data and artificial neural networks to provide an optimal portfolio for financial consumers. The Asset Distribution RoboAdvisor FASST engine using artificial neural network passed the Financial Services Commission's RoboAdvisor testbed for the first time as a startup and provides financial software and services to a number of financial institutions.

Tech & Service Info

☐ Visual Intelligence			☐ Sound Intelligence		☐ Language Intelligence
Core Al Data Driven / Modeling			■ Data Processing		☐ Hardware / Robotics
Core Ai	Reinforcement learning		☐ Autonomous driving		■AGI
	☐ AEI		□XAI		☐ Etc
Framewo	ork	Use self-developed artificial neural netv and Google's Tenso	work	Data type & secure	Learning data is structured data and financial data is collected and used properly.

Company's Core Al Explain

The FASST engine has passed the Financial Services Commission's Robo-Advisor testbed with the highest return and the Sharp index. It is operated with a continuous operation period. We also continue to do research and development to produce better results. In addition to its own engine, FAST, we are also using Google's Tenseflow to refine the engine.

Product and Service Overview

FASST is a financial asset management service using an artificial neural network and follows the process below.

- 1. Enter customer information(age, Expected revenue from customers, risk tolerance, Investment Purpose, Investment period, Investment Experience)
- 2. Multi-Provide Optimal Portfolio Based on Customer Inputs \rightarrow 3. Choose Portfolio \rightarrow
- 4. Order \rightarrow 5. Monitoring \rightarrow 6. Rebalancing \rightarrow 7. Performance report











Business mode	IT Software: B2B2C and B2B Selling
Target market	 Domestic Individual Investors with Robo-Advisor (30 trillion won within the next five years) Asset Management and Asset Distribution Market Extended to overseas markets and not to individual investors (Total assets operated by global robo-advisor at \$2.5 trillion within 5 years)
Customers	Individual investor customers, Kiwoom Securities, Shinhan Financial Investment, Mirae Asset Daewoo Securities, Hi Investment & Securities, DGB Financial Group, Shinhan Financial Group and other SI development & fintech areas.

Future plan

- 1. Developing a mobile version of Robo-Advisor Services
- 2. Developing domestic (stock, ETF, ETN, fund, etc.) markets for robo-advisor software products
- 3. Developing overseas markets for robo-advisor software products
- 4. Selling Robo-Advisor Services for Domestic Investors and Securing AUMs

Name	Data&Analytics	Establishment	In 2013	C.E.O	KyungSoo Kim
Phone	+82 2-512-1359	E-mail	info@dna.uno		
Main Bus	iness Field	Al Software etc			
Main Product and Service FASST E Services			DONUTZ and Fi	inancial I	Decision-Making
Investmen	nt history	600 million wo (Shinhan Bank,	on Shinhan Financial	Investme	ent Co. ,'16)



DataKubwa.Co.,Ltd.

www.datakubwa.com

Company Identity

DataKubwa stands for Big Data in Swahili, Africa.

DataKubwa is specialized in artificial intelligence and big data, and provide big data collection, analysis, and education services and customized solutions using fpga.

☐ Tech & Service Info

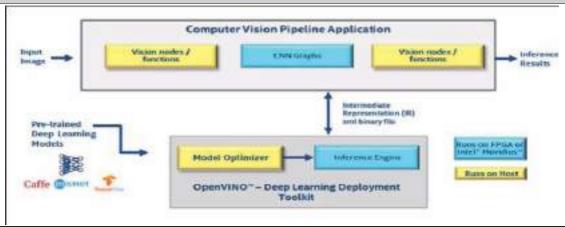
	■ Vis	■ Visual Intelligence		nd Intelligence	■ Language Intelligence
Core Al		■ Data Driven / Modeling		a Processing	■ Hardware / Robotics
Core Ai	☐ Reinforcement learning		☐ Auto	onomous driving	■ AGI
	□ AEI		□ XAI		☐ Etc
Ten		Tensorflow, Pytorch	٦,	Data type &	Video, image, text files
Framework		openVINO		secure	(self-purchase)

Company's Core Al Explain

Analyze video, image and text data with deep learning using Intel openVINO and FPGA

Product and Service Overview

Optimize deep learning analysis and reduce inference time with Intel FPGAs and openVINO



- 2019, TTA "Localization Project of Semiconductor Equipment"
- 2019, NHIS "Analysis System Development to Support Financial Monitoring"
- 2019, SRC, "4th Industrial Revolution" subcommittee
- 2019, MJC "Big Data & Sales Marketing Combination" new training course





Business model	Al & BigData analysis solution provider						
Target market	Al & BigData analysis						
Customers	Intel Korea & IT, IPIST(Korea) & IP and law, ZEEPS(Korea) &						
real estimate, kspsoft(Korea) & IT							

Future plan

Development of integrated hardware and software analysis solution based on Intel FPGA and openVINO

Name	DataKubwa	Establishment	In 2019	C.E.O	Josh Ko / Dave Sohn		
Phone	+82 10-4677-6658	E-mail	info@datakubwa.com				
Main Busi	iness Field	BigData analysis / Smart Factory / Digital Marketing / Education					
Main Prod	duct and Service	Kubwa FPGA / Trend Tracker					
Investmen	t history	90,000,000KRW (K-Data, TTA, 2019)					



DBNtech

www.dbnt.co.kr

Company Identity

DBNtech is specialized in developing next-generation technology, CCTV analysis of moving objects(such as car, person etc.) based on Deep-Learning and Big-Data technology.

□ Tech & Service Info

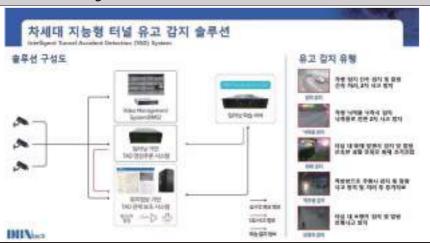
	■ Visual Intelligence			☐ Sound Intelligence		☐ Language Intelligence
Core Al	☐ Data Driven / Modeling			☐ Data Processing		☐ Hardware / Robotics
Core Ai	☐ Reinforcement learning		☐ Autonomous driving		■AGI	
	□ AEI		□XAI		☐ Etc	
Framework Tensorflow C		ata type & secure	ССТ	V videos (self)		
Company's	Company's Core Al Evolain					

Company's Core Al Explain

High Quality of Accident(or incident) Detecting from CCTV, High Efficient technique of decreasing monitoring system error rate.

Product and Service Overview

Al-based Tunnel Accident Detection system. Compared to computer vision-based video analysis techniques, this Al-based system is less influenced by weather or place and detects accidents with higher accuracy.











HW Combination, License			
Al-based CCTV surveillance system			
CCTV surveillance center			

Future plan

By developing human centered AI system(next-generation of self-improvement CCTV monitoring system), we will become a game changer of CCTV surveillance system

Name	DBNtech Establishment		In 2018	C.E.O	CHOI Jayoung
Phone	+82 32 721 5670	ahn@dbnt.co.kr			
Main Bus	iness Field	Al-based Public SOC(Social Overhead Capital) CCTV monitoring System			
Main Pro	duct and Service	Al-based Tunnel Accident Monitoring System			ystem
Investmen	nt history	100,000,000 won (KOSME, 2018)			



Deepixel Inc.

www.deepixel.xyz

Company Identity

Deepixel is a visual intelligence tech-startup based on computer vision and machine learning. Currently, we are focusing on the development of a virtual try-on technology for the future of jewelry/accessory AR commerce.

☐ Tech & Service Info

	■ Visual Intelligence		☐ Sound Intelligence	☐ Language Intelligence
Core Al	☐ Data Driven / Modeling		☐ Data Processing	☐ Hardware / Robotics
Core Ai	☐ Reinforcement learning		☐ Autonomous driving	☐ AGI
	☐ AEI		□XAI	☐ Etc
Framework		TensorFlow	Data type & secure	Hand and face images (self or data-providers)
Company's Core Al Explain				

Real-time visual tracking and feature analysis for human's hands and a face.

Product and Service Overview

StyleAR enables customers to virtually try on jewels to check a size or style before buying them. So, It makes customers enjoy highly-personalized service to find the perfect match for individuals.

Product and Service Image

The New Way of Jewelry AR Commerce







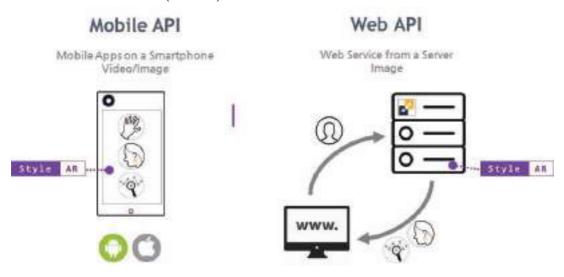


Virtual Try-on (Ring, Earrings)

Reality

User Analysis

- 2016.07 Selected for a startup incubating program supported by Korea Internet & Security Agency (KISA).
- 2017.08 Received investment from NAVER Corp.
- 2019.07 Selected for SK Telecom 5GX Accelerator program.
- 2019.08 Gained the certificate of AI technology from Korea Artificial Intelligence Association (KORAIA).



Business model	API Licensing and Subscription	
Target market	The global jewelry market	
Customers	Online Jewelry Shopping Malls	
Future plan		

Stepping forward to global market, and expanding business domain into other AR commerce products (ex. Manicure, Eye-wear, Headgear etc.)

Name	Deepixel Inc.	Establishment	In 2016	C.E.O	Jehoon Lee	
Phone +82 2-1644-5496		E-mail deepixel@deepixel.xyz				
Main Business Field		AR Commerce				
Main Product and Service		StyleAR, Virtual Try-on Technology				
Investment history		Naver Corp. (2017yr)				



Deeply Inc.

deeply.co.kr/en

Company Identity

We change people's lives by understanding the Sound, over the world. For these changes we are making an Artificial Intelligence Engine that analyzes the Sound that only experts can distinguish in the meantime.

□ Tech & Service Info

Core Al	☐ Vis	□ Visual Intelligence		nd Intelligence	☐ Language Intelligence
	■ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics
	☐ Reinforcement learning		☐ Autonomous driving		□ AGI
	■ AEI		☐ XAI		☐ Etc
Framework Self			Data type & secure	Sound data (self)	

Company's Core Al Explain

- -Real-time engine that detects and analyzes specific states of human sounds (laughing, crying, screaming, gender)
- -Baby sound detection and state analysis model and service
- -Mobile App, API Service

Product and Service Overview

Deeply has an engine that interprets the meaning of sound, not just text or natural language processing, but also sound signal using Al technology. Huge data informs you in real time about the meaning of voices. We have a strength of providing real-world audio service with high accuracy by directly acquiring large data of human and home sound.



- 2017.07.31 K-global startup competition award
- 2018.04.17 CCEI Digital healthcare competition award
- 2018.08.22 JJY startup comptetion award
- 2019.04.30 Facebook & namsanlab startup, F8 conference vedio
- 2018.12.01 Seoul university co R&D
- 2019.03.13 Google for startups, Al with google speaker
- 2019.09.23 SBS main news broadcasting









Business model	B2C sevice & engine
Target market	- Not fixed
Customers	- N/A

Fuure plan

Best solutions to understand the voice and meaning of people sound over the world.

Name	Deeply Inc.	Establishment	In 2017	C.E.O	Suji Lee	
Phone	Phone +82 70-7459-0704		hello@deeply.co.kr			
Main Business Field		Sound analysis service				
Main Product and Service		Baby sound monitor "WAAH" Voice analyzing solution "Bread"				
Investment history		seed investment KRW300M from Newflight in 2018				



DeepSpace Co., Ltd

preparing webpage

☐ Company Introduction

Deep Space Co., Ltd. is an artificial intelligence company that effectively connects Al professionals and consumers and provides Al model providing services and solutions for solving Al problems.

□ Tech & Service Info

	■ Vis	ual Intelligence	☐ Sound Intelligence	■ Language Intelligence
Core Al	■ Dat	ta Driven / Modeling	□ Data Processing	■ Hardware / Robotics
Core Ai □ Re		inforcement learning	□■ Autonomous driving	■ AGI
	□ AEI		☐ XAI	■ Etc
Framewo	rk	Own possession	Data type & secure	Own possession

Company's Core Al Explain

- AlFactory is a platform for predictive modeling and analysis competition.
- Registering data along with tasks that individuals and organizations want to solve is a system in which experts and data analysts in AlFactory develop models and register results.

Product and Service Overview

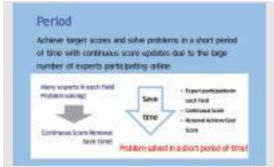
- AlFactory is an Al model providing service platform that solves Al problems by efficiently connecting Al professionals and consumers.
- With predictive ranking, the best rankings also receive prizes and rewards.













Business model	AlFactory Platform			
	The size of domestic and international markets is growing steadily			
	due to the need for a space for the connection between consumers			
Target market	who want to utilize AI ideas and proposers who provide many ideas.			
3	The domestic big data and analysis market will grow at an annual average of			
	10.9% over the next five years, reaching 22 trillion won in 22 years.			
	** The global big data and analytics market is expected to be \$ 92.2 billion in 26.			
Customers	Inspace, EasyDiatech, etc.			
Future plan				

Future plan

- Function enhancement and marketing strategy composition.
- Information gathering activities to discover overseas markets.

Name	DeepSpace Co., Ltd	Establishment	In 2017	C.E.O	Taeyoung Kim
Phone	+82 70-4914-0215	E-mail	tykim@inspace.re.kr		
+82 42-862-2737 Main Business Field		Artificial Intelligence, Deep Learning, Big Data, IoT			
Main Product and Service		AlFactory Platform			,, big bata, 101
Investment history		None			



DevUnlimit

www.devunlimit.com

☐ Company Identity

DevUnlimit creates AI platform solutions designed to make work and fitness management a joyful and efficient everyday experience. Using updated tech being researched an tested by big companies around the world, we develop services that enable your device to become your own personal trainer and manager.

☐ Tech & Service Info

	■ Visual Intelligence		☐ Sound Intelligence	☐ Language Intelligence
Carra Al	☐ Data Driven / Modeling		☐ Data Processing	☐ Hardware / Robotics
Core Al	☐ Rei	nforcement learning	☐ Autonomous driving	□ AGI
	☐ AEI		□XAI	☐ Etc
Framework Tensorflow		Tensorflow	Data type & secure	Image (self)
Company's Core Al Explain				

Real time motion capture using a single RGB camera

Product and Service Overview

- ChoomChoom

A new generation of fitness and entertainment training for those who want to improve body and mind.



- 2018.11 Sino-Korean Startup Contest 3rd Place
- 2019.05.17. CJ ENM KCON Japan Experience Zone
- 2019.07.06 CJ ENM KCON USA NY Experience Zone
- 2019.09.28 CJ ENM KCON THAI Experience Zone









Business model	SaaS with ads and premium content	
Target market	Global fitness and dance enthusiasts / 2.3B	
Customers 900+ early users		
Future plan		

Improve Al accuracy and add more real time fitness tracking and predicting systems. Help beginners and those working on their self development journeys achieve diverse fitness and wellbeing goals through a larger range of contents, even when alone.

Name	DevUnlimit	Establishment	In 2017	C.E.O	Andy Jeong	
Phone +82 10-4906-8884 E-mail root@devunlimit.com						
Main Business Field		Fitness and Entertaiment				
Main Prod	duct and Service	ChoomChoom and Homecoach				
Investmen	t history	None				



Elgen ICT

www.elgen.co.kr

Company Identity

ELGEN ICT Co., Ltd. was established in 2014, and has been reborn as an Al company by starting an initial call center and VOC business. Colbot, i-Speaker Al Speaker, i-Vision Vision / Face Recognition, i-MEX Personalized Service, i-Xen Big Data Analysis / TA, Smart Kiosk. Since its establishment, the company has built the world's first civil complaint integrated system, "Dudryo". It also developed the first Al chatbot, "Tubot," and built the Ministry of Public Notice. In recent years, we have been active in large enterprises, hospitals, and financial sectors.

Tech & Service Info

Carra Al	☐ Visual Intelligence	■ Sound Intelligence	■ Language Intelligence	
	☐ Data Driven / Modeling	☐ Data Processing	☐ Hardware / Robotics	
Core Al	■ Reinforcement learning	☐ Autonomous driving	☐ AGI	
	□ AEI	□XAI	☐ Etc	
- 1	M I DI (D. 1	Voice, Natural language /	
Framework	Wix-mind Platform	Data type & secure	Self-Securing	

Company's Core Al Explain

Elgen ICT's voice chatbot provides excellent reliability in terms of voice recognition by providing excellent functions in terms of voice recognition and noise reduction. In addition, by providing text and natural language processing, creating dialog sets for work, and creating scenarios that can be planned according to business processes, we help B2C companies and organizations to respond effectively to their customers and complaints.

Product and Service Overview

Elgen Key Solutions

Product and Service Image



I-Voice Voice Recognition / Voice Chatbot

- 2. i-Chat Chatbot
- 3. i-Callbot Virtual Consultation Callbot
- 4. i-Speaker Al Speaker
- 5. i-Vision Vision / Face Recognition
- 6. i-Me.X Personalized Service
- 7. i-Xen Big Data Analysis / TA
- 8. i-Smart Kiosk

- 2019.01.04. Lotte Cinema Smart Kiosk Voice Chatbot
- 2019.01.00 WebTour Intelligence Bigdata Crawling
- 2018.02.00 WebTour Travel Chatting Service 'Web talk"
- 2017.11.22. 1st in Korea Consumer Indices Index by Kookmin Libo









Business model	Voice recognition, NLU, Al
Target market	Al market
Customers	NS shopping, CJT, Lotte Cinema,, etc

Future plan

Wix3.0 Al and Big Data-based self-growing smart intelligent platform has been upgraded to provide a differentiated business platform for distribution, shopping, call center, and public markets.)

Name	Elgen ICT	Establishment	: In 2014 C.E.O Namhyun K		Namhyun Kim	
Phone	+82 70-8789-2035	E-mail elgen@elgen.co.kr				
Main Business Field		Voice recognition, NLU, Al				
Main Product and Service		Wix-mind Solution(i-Voice, I-Chat, I-Vision, I-Xen, I-Smartk)				
Investment history		300,000,000 Won(K-won C&C, '19)				



Company Identity

Ellexi is a Data Driven Artificial Intelligence Solution & Service provider with its expertise in software development. Our portfolio includes Deep Learning based anomaly pattern detection solution & service, context awareness solution, and big data analysis platforms on various operating systems and frameworks adopting Al technology to optimize business environment. AS a leading developer of core 4th Industrial Revolution technology, the AI, it is our goal to provide more practical and efficient AI solution.

□ Tech & Service Info

Core Al	☐ Visual Intelligence	☐ Sound Intelligence	☐ Language Intelligence
	■ Data Driven / Modeling	☐ Data Processing	☐ Hardware / Robotics
	☐ Reinforcement learning	☐ Autonomous driving	□ AGI
	□ AEI	□XAI	☐ Etc
Framework	Python/Tensorflow	Data type & secure	Self or Purchase

Company's Core Al Explain

Applies Deep-Learning Artificial Intelligence Technology to effectively monitor suspicious behaviors and patterns from internal networks as well as identify external threats. It simplifies a company's process of evaluating suspicious data patterns (i.e. Fraud) as well as external threats to networks. The process is real-time and creates an instant update environment for system security. Visualize basic statistical data from data fields, present insights for each data field, and recommend feature extraction methods after analysis. Automatically collects the data sets generated in real time and proceeds with learning to create models that reflect the latest changes. Hierarchical Behavioral Knowledge Space (HBKS) stores the records on abnormal patterns detected and defined by the administrator and update this information instantly. Provides a graphical representation of the distribution of user-generated data sets including learning progress, monitoring status, and result analysis.

Product and Service Overview

See Business Info

Product and Service Image





Philo-AD, Philo-G: Deep Learning based Anomaly Pattern Detection Solution & Service



3. Features

- Versatility. Customizable and applicable to various categories since it is not designed for a specific domain
- Accuracy: Instantaneous anomaly pattern memorization and application capabilities improve the detection accuracy
- No Consulting: The solution carries out modeling process based on normal data. Thus, there is no need of identify and designate anomalies before system integration and this significantly reduces consulting process for domain knowledge.

1. Product:

- Philo-AD* (Anomaly Pattern Detection Solution) / Philo-G: Anomaly Pattern Detection Service Saas)
- 2. Overview.
- Applying Deep learning technology to effectively detect and identify anomalies from time series data real time.

4. Structure

Hierarchical Behavioral Knowledge Space (HBKS): Storing anomaly patterns and its root cause identified by users, applying this information as a reference for future analysis

5. Uses

- Network Security (IDS, IPS, APT Detection)
- > Physical Security (Intelligent CCTV, Behavior detection)
 *Patented: Philo-AD structure Anomaly Pattern Detection
 System and its method (102031123000)

Business model	On-premise, Packaged SW License, SaaS
Target market	Global Al Log Monitoring(Management) market \$1.2 Billion by 2022 / Korea Integrated Log Management Market: 23M USD
Customers	Domestic Market SW Sales / License / Consulting Ministry of Trade Industry and Energy, KISA, NIPA, Fasoo, UMV, KT, POSCO ICT, LG Al Data processing Services using Philo-AD and Philo-G NaruSecurit, Wisywigs, Nafter, Metabiomed, People ventures, Solbox, 2digit, DMBH

Future plan

Overseas Market Expansion

- Provide Philo-G Trial services to potential overseas customers for feedback
- Secure partnerships with at least three(3) local companies
- Promotion and Pre-marketing based on buyer's search result
- Solution Performance verification by local institutions
- > Secure Local Market research material
- > Arrange road shows
- Attend Accelerating programs (Domestic, overseas) to meet with more people
- > Expand Solution/Service area

Name	Ellexi	Establishment	In 2016	C.E.O	Jangwon Suh
Phone	+82.70.7733.5679	E-mail eschoi@ellexi.com			
Main Business Field		Al System Program Development (Network Security, FDS, Log Monitoring, Document security, Predictive maintenance for smart factories)			
Main Product and Service		 Philo-AD: Deep Learning based Anomaly Pattern Detection Solution Philo-G(SaaS): Deep Learning based Anomaly Pattern Detection Service 			
Investment history		N/A			

EUCLIDSOFT EUCLIDSOFT Inc.

www.euclidsoft.co.kr

Company Identity

EuclidSoft possesses its own technical capabilities and secures various technologies (ETRI Technology Transfer) in order to contribute to realizing the convergence value of IT technology. It is nurturing research(Big Data Al Division, Corporate Research Institute) and technical talents. It is a SME venture company based in Daejeon, Sejong, and Chungcheong provinces.

☐ Tech & Service Info

Core Al	■ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence
	■ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics
Core Ai	■ Reinforcement learning		☐ Autonomous driving		■ AGI
	■ AEI		■ XAI		☐ Etc
Framewo	rle.	CV2, OpenCV, YOL	.О,	Data type &	Captured image frame,
riailiewo	IK	DeepView, LimeVie	eW.	secure	CCTV, Private WebCam

Company's Core Al Explain

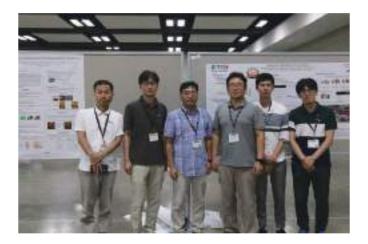
Technology to analyze video image data based on real time pose estimation

Product and Service Overview

Analyzing the garbage dump site images captured by CCTV cameras installed for the garbage dumping monitoring in the living environment by image unit. Used to monitor garbage throwing. It is a system that can be applied to various detection and monitoring activities according to the needs of consumers



- 2017.07.17 The ImageNet Large Scale Visual Recognition Challenge 2nd



Business model	HW Combination, Service provision method applied
Target market	CCTV supplier, Local government/2 billion won per year
Customers	Solution is being developed.
Customers	Solution is being developed.

Future plan

Developing solutions for video or image detection and surveillance activities of various social overhead facilities by applying CCTV video surveillance technology. Expand into sales models that provide solution services

Name	EUCLIDSOFT Inc.	Establishment	In 2014	C.E.O	Eun kyoung Chae	
Phone	+82-42-488-6589	89 E-mail ekchae@euclidsoft.co.kr		o.kr		
Main Business Field		software system maintenance & Developer statement				
Main Product and Service		SI/SM/ITcunsulting				
Investment history		N/A				



EverTran Co., LTD.

ww..evertran.com

Company Identity

Evertran (www.evertran.com), a natural language processing company, provides "Al technology and human convergence translation service" that delivers high translation quality while lowering the translation fee and providing fast delivery, through the automation and standardization of the entire process of translation services under an Al translation service platform that combines artificial neural network machine translation (NMT) technology and computer translation support (CAT) technology.

Tech & Service Info

	☐ Visual Intelligence	☐ Sound Intelligence	■ Language Intelligence
Core Al	☐ Data Driven / Modeling ☐ Data Processing		☐ Hardware / Robotics
Core Ai	☐ Reinforcement learning	☐ Autonomous driving	☐ AGI
	□ AEI □ XAI		☐ Etc
Framework	Evertran Al Translation Service Platform	Liata type XI secure	pairs of original texts and ranslations (self)

Company's Core Al Explain

Evertran provides high-quality professional translation services using computer developed CAT technology, artificial machine translation technology, incremental learning technology, and machine translation post-editing technology.

Product and Service Overview

- Utilization of Neural Machine Translation Technology
- Utilization of incremental learning technology to improve machine translation quality by building a parallel corpus for each field
- Utilization of professional translator post-editing skills
- Reuse of language resources such as translation memory and terminology, which are pairs of texts and translations
- Translation and review using specialized translation tools
- In addition to the translation file, provision of a file that allows the original document and the translation document to be viewed together in parallel



- 2017 First Prize in Quality Satisfaction in Korea (translation service)
- 2019 Encouragement Prize for Industrial Intelligence (AI + X) Startup Contest
- 2019 Korea Artificial Intelligence Association Al-Tech Certification
- The MOU signing ceremony for the Global Translation Service Agreement(EVERTRAN-USKN)









Business model	Evertran provides high-quality professional translation services using computer developed CAT technology, artificial machine translation technology, incremental learning technology, and machine translation post-editing technology.
Target market	The global translation market is huge, reaching hundreds of billions of years each year, but the market is gradually expanding, however translation service providers rely on existing manual methods to provide unstructured translation services. Evertran plans to grow into a global translation company by securing price competitiveness, translation quality competitiveness, and delivery competitiveness by using an advanced translation service platform using AI translation technology.
Customers	SsangYong Information and Communication Corporation, Korea Electrotechnology Research Institute, Korea Testing and Research Institute, Qualcomm Korea, Alvogen Korea, Sony Korea, Korea Conformity Laboratories

Future plan

Evertran utilizes an Al translation service platform that can quickly and accurately translate various documents from sources such as manufacturers, importers, exporters, government offices, and research institutes into global markets, as well as the US, China, Japan, and Asia. We plan to grow into a global translation company that solves language barriers around the world.

Name	EverTran Co., LTD.	Establishment	In 2006	C.E.O	LEE Cheong-ho		
Phone +82 2-797-2105		E-mail	E-mail webmaster@evertran.com				
Main Business Field		Translation Service, Translation SW Development, Al Translation Engine Development, Language DB Processing Construction					
Main Product and Service		Evertran AI High-Quality Translation, VisualTran Mate Translation SW					
Investment history		N/A					



FITCARE

https://www.facebook.com/fitcare.kr/

Company	, Ide	ntity
Company	IUC	IILILY

"Exercise is best medicine", FITCARE is digital therapeutics start-up and develops mobile application and AI for sarcopenia, obesity, metabolic syndrome, etc. our mission is to prove the treatment of disease and its prevention effect through exercise

□ Tech & Service Info

Comp. All	■ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
	■ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
Core Al	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI	
	☐ AEI		□XAI		☐ Etc	
				Planning to acquire aerobic exercise		
Framework	Tensorflow	Data type	e & secure	data from various university clubs		
				and partners	hip gym, YOUR-GYM	

Company's Core Al Explain

Our Deep Learning engineer researched medical image segmentation and now researches image segmentation with RNN

Product and Service Overview

FITCARE's service consists of FITCARE(phone application), Gymmate(exercise record device) and Deep Learning recommendation solution.

Also, we will provide Healthcare Service that enables health analysis through cooperation with hospitals and structuring personalized workout routines using deep-learning based recommendation solution



- -2019.09.26 D.CAMP Demo Day September D-DAY Pitching Team Selection Certificate
- -2019.08.22 Student start-up team 300 certificate
- -2019.08.23 Gyeongbuk Al Blockchain Startup Incubation Program Grand Prize
- -2019.07.19 Certificate of Encouragement Prize for KORAIA Competition









Business model	Revenue generating from providing FITCARE's solution				
B2B pre-existing gym that want to upgrade to smart health gym					
	B2C partnership gym's member				
Customers	YOUR-GYM, MIZMEDI hospital, MIZMEDI gym, EDGC				

Future plan

attracting investment after meet-up with VC preparing bitcoin creation for Initial coin offering to attract investment

Name	FITCARE	Establishment	In 2019	C.E.O	Yosup Kim,	
					YoonYeon Kim	
Phone	+82 10-5140-6240	E-mail	yossup1@gmail.com			
Main Business Field		healthcare/data mining				
Main Product and Service		FITCARE(phone application), Gymmate(exercise record device)				
Investment history		N/A				



Flitto Inc.

www.flitto.com

☐ Company Identity

Flitto is a multilingual data generation platform, supporting text, speech, and image collection from the Flitto user translation requests. Flitto provides these data to linguistic Al companies to improve the quality of their Al engine.

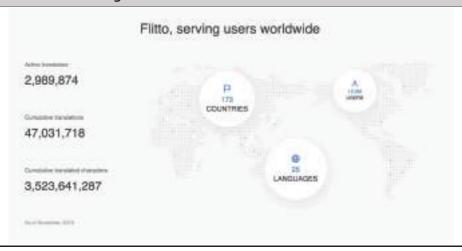
□ Tech & Service Info

	☐ Visual Intelligence	Sound Intelligence		■ Language Intelligence	
C . Al	☐ Data Driven / Modeling	☐ Data Processing		☐ Hardware / Robotics	
Core Al	☐ Reinforcement learning	☐ Autonomous driving		□ AGI	
	☐ AEI	□XAI		□ Etc	
Framework	Corpus Management Sys		Data type & secure	Collecting data using Flitto Platform	
Company's Core Al Explain					

Collecting and analyzing Linguistic data / Machine Translation, Voice Recognition

Product and Service Overview

- 1.Generating multilingual data through it's web/app platform
- 2. Analyzing data
- 3. Providing data to the clients.



2019.07 KOSDAQ IPO

2018.07 Established a Japan regional office (Tokyo)

2018.05 2nd place at the Fenox Startup World Cup 2018 (USA)

201704 Won the Seoul Tourism Start-ups' New Projects 2017

2015.10 Won DemoTheWorld (China)

2014.07 Won the IdeasShow startup battle (Taiwan)

2014.02 Won the Seedstars World Competition (Switzerland)

2013.12 Final winner of KBS' Golden Pentagon

2013.10 Participated as the representative of Korea for StartTelAviv held by the Israeli government

2012.10 Won the Grand Prize at 'Innovative Tech Startup' held by Morrison Foerster (UK)





Business model	Providing Data				
Target market Linguistic Al Market / USD 80b					
Customers Samsung, NTT Docomo, Naver, MS, Baidu, Tencent					
Future plan					

Collecting data through its platform and advance AI engine

Name	Flitto Inc.	Establishment	In 2012	C.E.O	Simon Lee
Phone +82 2-512-0142		E-mail	help@flitto.com		
Main Business Field		Linguistic Big Data			
Main Product and Service		Flitto Platform, Text, Image, Voice Data			
Investmen	nt history	2012~2016 USD 12M 2019July KOSDAQIPO			



GGulB Inc.

ggulb.net

Company Identity

GGulB, an artificial intelligence service company, aims to provide AI services and solutions that can naturally connect the world, business, and technology so that they can become a necessary and natural phenomenon in the world.

☐ Tech & Service Info

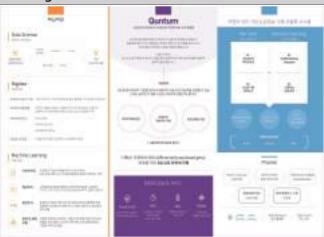
	■ Visual Intelligence		☐ Sound Intelligence		■ Language Intelligence	
Core Al	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics	
Core Ai	Reinforcement learning		☐ Autonomous driving		☐ AGI	
	□ AEI		□XAI		☐ Etc	
Framework		TensorFlow		Data type &	Paper information	
				secure	·	

Company's Core Al Explain

Natural language processing is applied to article data to summarize article information, and morphemes are categorized to inform the correlation between keywords. The big data platform is used to manage the entire data process from data collection, preprocessing, processing, construction and analysis.

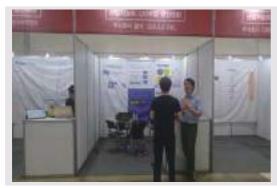
Product and Service Overview

- 1. Quntum(Genetic analysis tool using paper analysis technology using natural language processing)
- 2. Pavic(Big data platform for managing big data related processes)











Business model	Data analysis, License, SaaS
Taxaat maaileat	Universities, research institutes, companies related to genetic
Target market	information analysis / 300 billion won
C	KAIST (Korea), Korea Institute of Industrial Technology (Korea), Korea
Customers	Forest Welfare Institute (Korea)

Future plan

- 1. Perform and expand NGS analysis service using "Quntum system".
- 2. Plan and build new drug development platform by 2022 and apply artificial intelligence to drug discovery process.
- 3. Expand operation scale of big data platform by 2022 years Plans to develop machine learning data analysis platform.

Name	GGulB Inc.	Establishment	In 2015	C.E.O	Pherta Choi	
Phone	+82 42-482-2346	E-mail info@ggulb.net				
Main Business Field		Paper Analysis/New Drug Development/Bigdata Analysis				
Main Product and Service		Quntum(Intellige platform)	ent genetic analysi	is tools)	, Pavic(Bigdata	
Investment history		Private				

Gitple Inc.

Company Identity

Gitple provides enterprise-level chatbot contact center system. On Cloud-based SaaS, In-App to customer environment with Al enabled, Hybrid chatbot-agent to maximize customer experience.

☐ Tech & Service Info

Come Al	☐ Visual Intelligence		Sound Intelligen	ce	■ Language Intelligence
	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics
Core Al	☐ Rei	nforcement learning	☐ Autonomous driving		□ AGI
	☐ AEI		□XAI		☐ Etc
Framework		Proprietary	Data type & secu	ire C	S conversational data

Company's Core Al Explain

- Support diverse channels for customer service(SMS, In-App and Voice) and connect to any chatbot builders you want.
- CS automatic chatting summary, real-time answer recommendation and etc.
- Open API for chatbot integration and consultation data.

Product and Service Overview

Gitple offers 'GitpleChat', an interactive customer support(CS) platform for the ultimate customer experience. 'GitpleChat' is a Software-as-a-Service that enables customers in various industries to use the professional CS without any introduction cost. Major features are in-app chat support and seamless hybrid between agent and chatbot.



- 2018.09.01 Lotte Home-shopping veterinarian chatting system
- 2018.10.01 SK E&S Kangwon CS Chatting system
- 2019.02.15. Barogo CS chatting system
- 2019.10.31. Digital Innovation Awards2019 IT/CS chatting system









Business model	Software-as-a-Service
Target market	Cloud contact center market size: KRW 450B in 2022
Customers	O2O service company who needs customer support

Future plan

We plan to evolve into an omni-channel contact center solution that accepts phone calls and emails beyond chat. We plan to actively apply Al technology to assist agent.

Name	Gitple Inc.	Establishment	In 2017	C.E.O	Youngsoo Lee	e
Phone +82 70-8838-0118 E-mail		E-mail	contact@gitpl	e.com		
Main Business Field		Conact Center as a Service				
Main Product and Service		Hybrid chatting a	and chatbot so	lution, Git	pleChat	
Investment history		seed investment 2019	KRW200M	from Post	tech-Holdings	in



Hancom Interfree, Inc.

www.interfree.com

Com	pany	Identity
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We provide total translation solutions using speech recognition and automated translation technologies. In cooperation with HANCOM and ETRI, we create differentiated customer value across a variety of fields.

☐ Tech & Service Info

Corre Al	☐ Visual Intelligence		Sound Intelligence		■ Language Intelligence
	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics
Core Al	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI
	☐ AEI		☐ XAI		☐ Etc
Framework	ETRI's framework	Data type & secure		languages wi	arallel corpus of foreign th Korean (transferred from ld by ourselves)

Company's Core Al Explain

- Multilingual speech recognition technologies based on deep learning technology which can be optimized for specific domains of customer.
- Multilingual NMT(Neural Machine Translation) technology based on deep learning which can be optimized for specific domains of customers so it provides more fast and accurate performance.
- Online and embedded solutions for both the service and offline devices

Product and Service Overview

- GenieTalk App service
- Voice translation service for smart phone (for iOS and Android)
- Support 29 languages, voice/text/OCR translation
- ② GenieTalk VOICE (Automatic Speech Recognition)
- Speech recognition technology based on deep learning
- Korean, English, Japanese, Chinese, Spanish, French, Russian, German, Arabic, Vietnamese and etc.
- SaaS for cloud service, online engine for on-premise and embedded for mobile or terminal devices
- 3 GenieTalk TEXT (Automatic Machine Translation)
- NMT(Neural Machine Translation) technology based on deep learning
- Translate between Korean and other languages (English, Japanese, Chinese, Spanish, French, Russian, German, Arabic, Vietnamese and etc.)
- SaaS for cloud service, online engine for on-premise and embedded for mobile or terminal devices
- (4) GenieTutor (Pronunciation evaluation)
- Korean and English pronunciation evaluation solution for non-native speaker based on deep-learning technology

Product and Service Image

See Business Info





Business model	SaaS with Cloud service, API service, on-premise solution and license per
	device model for embedded solution
Target market	 Web & Mobile :translate E-mail, website, SNS contents, e-book and automatic translator IoT: voice interactive robot, smart home, automotive and wearable with ASR Contact Center: translation service for hotel, phone call translation, customer service with ASR and translate CS messenger Education: speaking trainer, writing trainer, interactive language learning solution and education robot Media: machine translation for digital signage/menu and automatic subtitles with translation
	SK Telecom, National Museum in Korea (Yongsan and Naju), Seoul metro
Customers	city, Pusan metro city, Police office, PyeongChang Organizing Committee for
	the 2018 Olympic Games and HANCOM

Future plan

• Expand languages support

add the languages with latest Al learning technology and focus on unpopular languages (Southeast Asia, Far East Asia, African and etc.)

• Evaluating technologies

improve the performances with supporting dialects and provide specialized technologies by automating domain application

• Market diversification

pioneering new markets by expanding technology utilization and entering the public market by developing social grievance resolution

Name	Hancom Interfree, Inc.	Establishment	In 2015	C.E.O	Oh SoonYoung	
Phone +82-31-627-7106 E-mail			genietalk@inte			
Main Business Field		multilingual speech recognition and machine translation technologies as solution and service				
Main Product and Service		GenieTalk App(iOS and Android), GenieTalk VOICE, GenieTalk TEXT and GenieTutor				
Investment history		KRW 210 Million KRW 2 Billion With/Hancom	on (ETRI, '18) (Hancom/Hanco GMD/Hancom T	m MDS/Ha eladin/Unim	ncom nax Global, '18)	

HBsmith>

HBsmith, Inc.

https://hbsmith.io

Company Identity

HBsmith is an online service automation test solution.

24/7 Al Automation Bot tests your service like a person.

In the event of a service issue, Bot will send you an immediate notification.

□ Tech & Service Info

Core Al	■ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence
	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics
	☐ Reinforcement learning		☐ Autonomous driving		□ AGI
	□ AEI		□XAI		☐ Etc
Framework	Calf dayalanad Data		type & secure	User be	havior patterns, online
riainework	Self-developed Data		type & secure	service i	mage

Company's Core Al Explain

HBsmith self-developed solution user behavior learning and comparison algorithm implementation.

Operation of online service to check and control AI test results.

Product and Service Overview

Al solution HBsmith Deep performs online service quality assurance (QA) functional tests. When a problem occurs, notifications are sent to various channels such as KakaoTalk, phone, text, and email.

For example, Al Bot tests different scenarios like a person logging in to a shopping mall, viewing a product, or making a purchase.





Business model	Al QA automation test agency			
Target market	Software QA Market / 500억			
	SixShop, Jober, Peoplefund, 한국어음중개, Lately, YOUR.GGtics,			
Customers emmental, Wanted, 모두닥, Tyle, Crema, 크라우드픽, Shiftee,				
	Dogmate			

Future plan

- 1. Android, iOS Test virtualization environment \rightarrow The physical device environment
- 2. Enhanced Vision Analysis
- 3. User UI / UX Improvements

Name	HBsmith, Inc.	Establishment	In 2017	C.E.O	HAN JONG WON	
Phone	+82 10-9166-6855	E-mail hello@hbsmith.io				
Main Business Field		Software				
Main Product and Service		1. HBsmith De QA automa without instal	ted test :	service d codin	replaced by Al Bot g	
Investment history		pre-A 500 million				



HNS COMMUNICATION

http://hnscom.com/

Company Identity

HNS brings new personalization and recommendation services and solutions by integrating AI with logistics data and advertisement / content data. In the future, we plan to expand the model by integrating dynamic changes of consumers, application of external issues, and complex knowledge systems.

□ Tech & Service Info

Core Al	☐ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
	■ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics	
Core Al	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI	
	□ AEI		□XAI		☐ Etc	
Framework		type & ecure	How to secure: S	nopping purchase history / Self-control logistics ay, Play 3PL data		

Company's Core Al Explain

- -Pattern Derivation Algorithm According to User's Purchase Information
- -Product recommendation technology through pattern learning
- -Responsive reinforcement learning algorithm
- -Personalized content algorithm

Product and Service Overview

-Al product recommendation service based on logistics data



- Selected as an excellent enterprise for open competition in 2019









Business model	Al Logistics Solution, Al Online Advertising Platform				
	Revenue 30 billion target / Online shopping market 111 trillion won				
Target market	in 2018, Derivative logistics service market 100 trillion, Logistics				
	solution market 200 billion market				
	Logistics-Refreshing (domestic), Plan Logis (domestic), etc. 20				
Customore	companies / Online advertising-Chosun Ilbo (Korea), Kookmin Ilbo				
Customers	(Korea), Trend News (Korea) and more than 100 domestic media				
	companies				
E.t					

Future plan

Through logistics solutions combined with Al and online advertising platform, the company intends to create a service that provides customized products and advertisements to end consumers.

Name	HNS COMMUNICATION	Establishment	In 2012	C.E.O	SHIN JUNG HOON	
Phone +82 2-6121-8927		E-mail	media@hnscom.com			
Main Business Field		Online advertisement, Logistics Solution				
Main Product and Service		EASYPLAY, PLAY3PL				
Investment history		160 million won (Supporting commercialization of outstanding companies in 2019 open competition)				



HONBABIN INC.

www.honbabin.com

Company Identity

Honbabin Inc. provides personalized dining contents and mobile ordering service for one-person households, and issuing and supplying mobile giftcards (e-Coupon) based on the Solo-Dining Economy.

☐ Tech & Service Info

Core Al	■ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
	■ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics	
	☐ Rei	☐ Reinforcement learning		onomous driving	■ AGI	
	□ AEI		☐ XAI		☐ Etc	
Framework		Apache MXNE	T	Data type & secure	Natural Language, Image (self)	

Company's Core Al Explain

Receipt Vision Recognition

- Determination of Single Dining based on Price/Menu of Receipt

Menu/Store for a Single Dining Recommend

- Recommend via Collaborative Filtering based on Similarity of User and Item

Product and Service Overview

Sorting Method for Single Person-household (Patent No. 10-1895576)

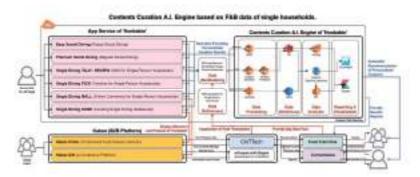
- Segmented user data based on Single Person-household dataset
- Probabilistic Prediction of Single Person-household for Specific User and Promotion by clustering user groups with the same probability

Solo-Dining Contents Curation based Al

- Recommend restaurants/menus for Own Meals
- Effective Contents Demand Prediction based on User's Structured and UnStructured Data



- 2019.05.01 IBK ChangGong
- 2018.07.31 Venture Business Certification
- 2018.05.15 Culture Guarantee Company
- 2017.12.29 K-Global Startup 300



Business model	On-demand Mobile Ordering, SaaS		
	Domestic Single Dining Market		
	- As of 2018, it accounts for about 20% of the total dining market of 136 trillion won		
	- Effective market is expanding further due to growth of other mobile delivery app services		
Target market	Domestic Mobile Dining Giftcard		
	- 40% of the domestic mobile giftcard market, which is expected to reach 4.5 trillion won by 2020		
	- Leading the market by fusing not only franchises but also general self-employed stores		
Customers	B2C Single Person-household / B2B Franchises Header		

Future plan

Plan to expand brand Companies and affiliated stores

- 50 franchise companies and 25,000 affiliated stores by the end of 2020

Plan to obtain Additional B2B Sales Channels

- B2B Welfare Malls, and B2G channels

Plan to enter the Food Distribution Market

Name	HONBABIN INC.	Establishment	In 2017	C.E.O	Jake Jeon	
Phone	+82 2-6929-4587	E-mail	ceo@honbabin.com			
Main Business Field		Mobile Ordering Service / Mobile Giftcard (e-Coupon)				
Main Product and Service Name The		The Single Dining / True Coupon				
Investment history		100 million won (CNTTech, 2017) / 500 million won (TIPS, 2017)				



HRM Corporation

www.hanvitcorp.com

Company Identity

Specialized on the recycling & resource trading and food manufacturing & distribution, HRM aims to establish an Al distribution platform and food tech business which is eco-friendly and sustainable.

☐ Tech & Service Info

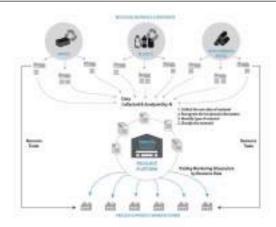
Core Al	■ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
	☐ Data Driven / Modeling		■ Data Processing		■ Hardware / Robotics	
	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI	
	□ AEI		□XAI		■ Etc (TBA)	
Framework	ТВА	Data type & secure		Resources (paper, p	plastic, non-ferrous metal)	

Company's Core Al Explain

Through visual recognition of resource & recycling material data we sort the scraps and provide automatic logistic service to recycling factories; Collecting resource distribution and logistic data, build an optimized global logistic service (TBA)

Product and Service Overview

- Classification system based on types and quality of resources and recycled materials
- Logistic platform utilized the distribution and movement data of resources







Business model	SaaS/ HW Combination
Target market	The scrap metal recycling in the United States: \$26.83 billion
	Hansol Paper, Daehan Paper, Samjung Pulp, Ssangyong C&B,
	Monalisa, Mirae Paper, Daewang Paper (Republic of Korea);
Customers	Berli Jucker Public Company Limited, The Siam Cement Public
	Company Limited (Thailand);
	International Forest Products, New Port (United States)
	Fortuna value

Future plan

- By utilizing AI, to collect and analyze real-time data on the types and quality of resource and recycled materials around the world
- to improve the efficiency by delivering accurate information where resources are needed $% \left(1\right) =\left(1\right) \left(1\right$

Name	HRM Corporation	Establishment	In 2016	C.E.O	Sungchan Ahn	
Phone	+82 31-907-2030	E-mail info@hanvitcorp.com				
Main Business Field		Resource Trading, Logistics, Food Manufacturing and Distribution				
Main Product and Service		Recycling resource trading (Paper, Plastic, Non-Ferrous Metal), Organic Food manufacturing and distribution				
Investment history		N/A				



www.icon.ai

☐ Company Identity

- > Software develop:Proprietary UX solution for Smart Display of Alexa 3rd Party ODM/OEM
- > Smart Makeup Mirror: Our own Brand, Venus is World 1st Smart Makeup Mirror Device with various Features. Unveiled CES 2020 and Venus named as CES2020 Innovation Awards Honoree.

□ Tech & Service Info

Come Al	■ Visual Intelligence		☐ Sound Intelligence	☐ Language Intelligence
	☐ Data Driven / Modeling		☐ Data Processing	■ Hardware / Robotics
Core Al	☐ Reinforcement learning	forcement learning		☐ AGI
	□ AEI		□XAI	■ Etc
Framewo	rk ICON	Engine	Data type & secure	Not Public

Company's Core Al Explain

Proprietary UX solution for amazon Alexa 3rd party/ODM Smart Display Speaker and Smart Makeup Mirror Features

Product and Service Overview

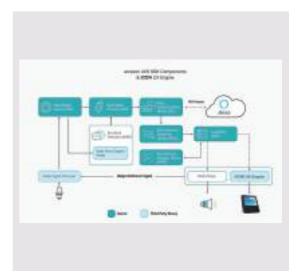
Proprietary UX solution for amazon Alexa 3rd party/ODM Smart Display Speaker and Smart Makeup Mirror Features.





- CES 2020년도 Innovation Awards(혁신상) 수상: Smart Makeup Mirror with Alexa Built-in
- Awarded Chairman of Korea IT Service Industry Association: UI / UX Solution for Al Speaker (Applied to Amazon and Alexa)
- 2 patents registered





Business model	S/W: License Fee, Device: Sales Volume				
	28% of the 128 milliion U.S Households,2018 and grow to 75% by				
Target market	2025. Forecast to rise 291 million units and \$30 billion in 2025 revenue. by Loup Ventures June,2019				
Customers	amazon Aelxa3RD PARTY/ODM & Beauty Consumer market				
Future plan					

Focus on AI based Smart Display Speaker and develop for various Features. Develop for Smart Device based on User Experience.

Name	ICON AI Inc.	Establishment	In 2015	C.E.O	James Shin		
Phone +82 10-5273-7997		E-mail	james.shin@icon.ai				
Main Business Field		Al Smart Display Speaker & World 1st Al Smart Makeup Mirror with Alexa Built-in					
Main Product and Service		ICON UX/UI for amazon Alexa 3rd party/ODM & Smart Makeup Mirror Device Manufacturing(Venus)					
Investment history		N/A					



imcloud

www.imcloud.co.kr

Company Identity

I'm Cloud, which started as a technology company in big data field, has the best technology in AI deep learning field. We are currently expanding our business with cloud-based AI Chatbot and video image deep learning services. We are actively entering the global market with prepared products and services. Confident of success in numerous projects, we are providing our products and services to more customers.

☐ Tech & Service Info

Cove Al	■ Visual Intelligence		☐ Sound Intelligence		■ Language Intelligence
	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics
Core Al	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI
	□ AEI		□XAI		☐ Etc
Framework		Self-Development & Tecsorflow	Data type & secure	Jobs, im (self-sec	ages and text data ured)

Company's Core Al Explain

ImCloud, which has accumulated Big Data technologies, has been expanding research and investment about A.I technologies. We not only combine original Big Data processing solutions and develop services, but also progress A.I service development for specialized industries. Since we launched A.I Chatbot Solution 'Addie' in 2017, we have been providing the chatbot services to a variety of customers such as the companies in the finance, public, and education fields.

Product and Service Overview

I'mCloud Addie: Chatbot Builder Software

I'mCloud DeepSight : Image Deep Learning Toolkit Software

I'mCloud A.I Gallery Service: Self-Fusion Authoring Technology customized for shared works

Addie Education Service: Education Service using A.I Speaker

Product and Service Image



Moreover, based on the core technologies in Deep Learning and Big Data, we have been continuously performing Image Deep Learning research: image deep learning in medical and copy right fields such as 'functional technique of copyright image research', X-ray Medical Information System Analysis Technology, promoted by Ministry of National Defense', and 'Development of A.I service platform for insomnia treatment using smart sensor'. You can explore these A.I know-how, receiving cloud-based Saas service.

2019:

- Selected for "Big Data Platform and Center Construction Competition", promoted by the Ministry of Science and ICT.
- Selected for 'Development of sleeping health AI service platform using smart bed, promoted by the Ministry of Science and ICT.
- Operate Cloud-based Chatbot call-center for Hana Securities.

2018 -

- Awarded Minister of Small and Medium Business Administration by Korean Government(I'mCloud) 2017 :
- Development of A.I service platform for sleep health and insomnia treatment with Yonsei Medical Center.(Continuing)
- Selected for 'Development of Customized Creation Support Technology for Public Domain Images based on Intelligent Information', promoted by Ministry of Culture, Sports and Tourism.(Continuing)
- Awarded Prime Minister Award for S/W Industrial Development(CEO Lee Doo-Sik)





	Cloud-Based Chatbot Saas Service				
Business model Cloud-Based Image Deep Learning Development API Service Constru					
	Data Platform Business for Big Data Analysis and Processing				
Target market	Cloud-based chatbot, deep learning market / \$ 47 billion ('20) \$ 73 billion ('21)				
	Numerous Big Data and A.I references such as Hyundai, Samsung, Shinhan,				
Customers	Amore, Roadwork, Gyeonggi-do Provincial Government, and Yonsei Medical				
	Center				
Future plan					

-A.I Chatbot Service

Development of Saas-based A.I Chatbot service for the people

-Globalization of medical-related deep learning technologies

Develop medical image and data analysis to the global top-level by X-ray and sleep health data deep learning

-Promote copyright image deep learning technologies as a service

Launch copyright image transfer technologies and the related service through years of experience in copyright deep learning image analysis

Name	imcloud	Establishment	In 2014	C.E.O	Doosik Lee	
Phone	Phone +82 2-6472-0410		E-mail imcloud@imcloud.co.kr			
Main Business Field		A.I Chatbot/ Image DeepLearning/ Big Data Analysis/ Big Data Development				
Main Pro	Main Product and Service		Pata Platform Supply and pot Solution 'Addie' Pecognition Solution 'De logies	based	on Big Data	
Investmen	t history	Private	-			



INFINIQ Co., Ltd

www.infinig.net / www.data-hub.ai

Company	ld	len	titv
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For the last 20 years, INFINIQ has been working with global partners. It offers optimized high-quality AI learning data service based on quality control expertise in SW testing as well as leading AI learning data technology.

□ Tech & Service Info

Framework Data-Hub(data package)		Data type & secure	Al learning data service Possessing data for autonomous driving learning
Core Al	☐ AEI	□XAI	☐ Etc
	■ Reinforcement learning	Autonomous driving	☐ AGI
	□ Data Driven / Modeling	Data Processing	☐ Hardware / Robotics
	■ Visual Intelligence	Sound Intelligence	Language Intelligence

Company's Core Al Explain

INFINIQ's technology for AI learning data has already been proven

in several projects. It offers the world's best high-quality Al learning data service by collecting, labeling and selling datasets.

- > Voice Data Collecting : Al speaker / Home appliance, Voice chatbot (call center)
- > Vision Data Collecting: Autonomous driving solution, Medical (diagnosis/operation), Smart Home /Security (CCTV), Smart Factory, Health care
- > High-Definition(HD) Map Construction : Autonomous driving solution, Al drone, Monopod
- > Data Collecting vehicle operation for the autonomous driving field
- > Fields Other Than Autonomous Driving : Security video, facial image and voice by gender/age/race, and shop data

Product and Service Overview

- > Data collecting vehicle operation for the autonomous driving field: Scenario-based learning and reinforcement learning for special environment are collected, and data required for all learning are collected directly by integrated recognition based on LiDAR-linked data.
- > Al Automatic Object Detection Solution : Al solution for preprocessing of autonomous driving data
- > Global Annotation Center: Higher complexity and data provide more than expected processing speeds and excellent budget reduction.
- > Annotation Tool : Self-standardized classification criteria is embedded. It enables customers to customize property and drawing type by object based on customers' needs with 100% satisfaction, if necessary
- > Data-Hub(Data Package): Data Package of classification criteria that has been standardized through several cooperative processes with local leading Al companies is available.









- Ranked 1st in the first quarter of the 2019 LG Electronics supplier evaluation
- Participated in 2019 AI EXPO
- Ranked 1st in the 2017 LG Electronics supplier evaluation
- Received the Excellent Quality Award by Huawei in 2016
- Ranked 1st in the 2016 LG Electronics supplier evaluation

Business model	Al learning data service				
Target market	We plan to open the Auto Detecting Solution or Annotation Tool developed by our company in the form of open source to contribute to the development of the domestic Al industry. Also, We are expanding the data items sold by Data-Hub, a data sales platform, and will become a global company that provides data to global Al companies by pioneering overseas markets.				
Customers	HYUNDAI, Qualcomm, LGElectronics, SKtelecom, Seoul National University, NIA, K-DATA				
Future plan					

1. sort-term plan : We plan to open the Auto Detecting Solution or Annotation Tool developed by our company in the form of open source to contribute to the development of the domestic Al industry.

2. Mediumterm Plan:

We will continue to expand the data items sold on our data sales platform, and aim to become a global company that provides data to global Al companies by pioneering overseas markets.

Name	INFINIQ Co.,Ltd	Establishment	In 2001	C.E.O	Junhyung Park, Sungun Noh
Phone +82 2-525-2202		E-mail	sales@infiniq.co.kr		
Main Business Field		Al learning data service			
Main Product and Service		AI learning data service			
Investment history		N/A			

Infoboss

Infoboss inc.

www.infoboss.co.kr

Company Identity

Establishment of large-scale middleware and integrated web interfaces for managing analysis modules together with development of the standardized genome database (GenomeArchive®) for efficient comparative genomic analyses. Integration of secondary metabolites, its biochemical pathways, and properties of chemical compounds together with Genome Information System (GiS) and useful information for biological resources (UIBR). Prediction of new way of utilization of secondary metabolites based on biochemical pathways using MetaPre-AlTM engine and verification of the predicted secondary metabolites using Meta-ISMTM.

☐ Tech & Service Info

Carra Al	☐ Visual Intelligence		☐ Sound Intelligence	☐ Language Intelligence		
	☐ Data Driven / Modeling		■ Data Processing	☐ Hardware / Robotics		
Core Al	☐ Reinforcement learning		☐ Autonomous driving	□ AGI		
	□ AEI		□XAI	☐ Etc		
Framework Self		Self	Data type & secure	Self		
C	Company's Core Al Evalein					

Company's Core Al Explain

Our engine (Meta-PreAlTM) operated with artificial intelligence(Al) engine is specialized for predicting possible secondary metabolites derived from genome sequences and useful information for biological resources.

Product and Service Overview

- Integration of secondary metabolites, its biochemical pathways, and properties of chemical compounds equipped with Genome Information System (GiS)
- Prediction of new way of utilization of secondary metabolites based on biochemical pathways using Al engine (MetaPre-Al TM)

Product and Service Image

Genome Information System









	Service for providing new predicted materials originated from			
Business model	biological resources from their useful information and genome			
business model	sequences with specialized artificial intelligence engine			
	(MetaPre-Al™).			
	- Market for natural medicines			
	- US natural medicine market volume was 8.1 billion dollars (9.7			
	trillion won) in 2013.			
Target market	- European market size was 5.1 billion dollars (6.2 trillion won) in			
	2013.			
	- Chinese market size is 2.5 billion dollars (3 trillion won).			
	- Japanese market size is 1.5 billion dollars (1.8 trillion won).			
Customers	Donga-ST, Daehwa pharmaceutical, Ildong Pharmaceutical, WhanIn			
Customers	Pharm, Kwangdong Pharmaceutical			
	Future plan			

Provision of new paradigms for utilizing biological resources through combination of diverse information of biological resources.

Contribution on industrial areas via integration and analyses of diverse information of biological resources

Name Infoboss inc.		Establishment	In 2015	C.E.O	Park jong sun	
Phone +82 2-6341-1185		E-mail	jasonshon@infoboss.co.kr			
Main Business Field		Genome analysis / New material discovery				
Main Pro	duct and Service	IBIS and GiS				
Investmer	nt history	N/A				



InSpace Co., Ltd.

www.inspace.co.kr

Company	Identity
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InSpace is a super-gap technology company in satellite image processing and SW development. InSpace's vision is to improve accuracy and to automate processes using AI technology to aerospace. We have analysis technology based on AI and ground station system such as target detection analysis using satellite/drone image.

☐ Tech & Service Info

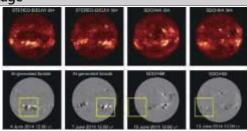
Core Al	■ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence
	■ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics
Core Ai		Reinforcement learning		onomous driving	☐ AGI
	□ AEI		□XAI		☐ Etc
Framework		InStation Platform(sel- Framework), TensorFlo Keras, Pytorch		Data type & secure	satellite image(buy or online), drone image(self), proton Time-series data (online)

Company's Core Al Explain

- 1. Visual Machine Intelligence: A technology that detect and classify objects of interest based on image data such as satellite image and drone image.
- 2. Time-series Data Driven / Modeling : A technology that Time-series data analysis technology for space environment data prediction.

Product and Service Overview

- 1. Time-series resolution enhancement technology of meteorological satellite products based on deep learning: A technology that deep learning based satellite image interpolation to compensate for satellite images generated every 30 minutes.
- 2. Space environment monitoring technology based on deep learning: Al technology that detects and predicts such as corona holes, sunspot explosions and filaments during solar activity.
- 3. The software of satellite data integration data processing (InStation): High-quality ground station platform that incorporates real-time data processing and various GEOINT algorithms, as well as the latest technology to provide image analysis, statistics, and dashboard operating environment.



- 2019.09.02 Journal of coastal research 'Oil Spill Detection from PlanetScope Satellite Image: Application to Oil Spill Accident near Ras Al Zour Area, Kuwait in August 2017'
- 2019.08.26 Accredited to TTA(Telecommunications Technology Association) Certification
- 2019.03.06 Loft Orbital Solution Inc. MOU
- 2019.03.04 Nature astronomy 'Solar farside magnetograms from deep learning'









Business model	SW license
Target market	Satellite image analysis and service market
Customers	Korea Aerospace Research Institute, K-water, Environmental Satellite Center, LG U+, Hanwhasystems, KT, SPARRSO(Bangladesh) etc
	Future plan

Inspace is expected to grow as a specialized company in satellite utilization system through cooperation with domestic and overseas partners, and will expand AI technology detection based change detection service and target analysis service.

Name	InSpace Co., Ltd.	Establishment	In 2012	C.E.O	Myungjin Choi		
Phone	+82 42-862-2781	E-mail	E-mail prime@inspace.re.kr				
Main Busi	iness Field	Ground Station/ Sp	Ground Station/ Space Environment/ Remote Sensing/ Al				
Main Prod	duct and Service	Time-series resolumeteorological sa Space environmen The SW of satellit	tion enhancement t tellite products t monitoring techn e data integration	technology ology processing	y of g (InStation)		
Investmen	nt history	N/A					

] [Intellic•n

Intellicon Lab

ww.intellicon.co.kr

Company	Identity
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Intellicon Lab is a professional legal AI company possessing patented original technology which integrates legal natural language processing, deep learning, machine reading comprehension, and algorithm for legal reasoning. With such cutting-edge technologies, the company have developed series of state-of-the-art product. In 2015, the lab developed "U-LEX", the 1st legal information system in Korea. In 2016, "Law-BO" was developed, the 1st legal chatbot in Korea. In 2018, the lab developed "Lawmeca", the hybrid legal Q&A system, and The Asian 1st contract intelligent analyzer, "Alpha-Law", was developed in 2019.

	Tech	&	Service	Info
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	☐ Visual Intelligence		☐ Sound Intelligence		■ Language Intelligence	
Core Al	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
Core Ai	■ Reinforcement learning		☐ Autonomous driving		■AGI	
	☐ AEI		■XA	Al	☐ Etc	
Framework i-LIS(Intelligent Legal Information System)			Data type & secure	Legal Documents (Self)		

Company's Core Al Explain

Intelligent legal information system by Intellicon Lab integrates original technology such as deep learning, legal reasoning, machine reading comprehension, and legal natural language processing technology.

In particular, "legal natural language processing technology" is not just a keyword-based system, but a system that allows Al to find the appropriate search results though everyday terms or sentences are entered into the system. In addition, the system is capable of analyzing the legal sentences in the document in bulk because the legal reasoning techniques are integrated together with natural language processing techniques optimized for legal terminology.

Based on these technologies, Intellicon Lab is offering the service such as "U-LEX" (intelligent legal information system), "Lawmeca" (hybrid legal QA platform), and recently introduced Artificial Intelligence based Contract Analyzer, "Alpha-Law", and in turn the company was recognized for its technology by winning a big score in a competition with human lawyers.

Product and Service Overview

- 1. U-LEX: Intelligent legal information system
- 2. Lawmeca: Hybrid legal QA platform
- 3. Alpha-Law: Artificial Intelligence based Contract Analyzer



- Excellence Award on Korea Invention Patent Exhibition 2019
- Grand Prize on Legal Tech, 2018 Korea Company Grand Awards
- Selected as a Next Generation World-Class Product of Korea, "Intelligent Legal Information Systrm", 2017
- Obtained the Certification of Good Content Service, "Intelligent Legal Advisor "Law-Bo"" 2017
- The Winner of COLIEE (Competition on Legal Information Extraction-Entailment) Two Consecutive Years (Tokyo 2016, London 2017)







Business model	Saas, License
Target market	Domestic Legal Tech market / 174 million USD
Customers	N/A

Future plan

- Leading the legal AI market domestically and internationally
- Contributing to the development of the national regal tech industry
- Improving access to legal information for the public through the elimination of information asymmetry
- Expansion of public legal services for citizens in need of legal assistance

Name	Intellicon Lab	Establishment		In 2013	C.E.O	Young-yik Rhim
Phone	+82 2-6284-0195	E-mail		admin@intellicon.co.kr		
Main Bu	ısiness Field	Development of Intelligent Legal Information System				
Main Pr	oduct and Service	U-LEX, Lawmeca, Alpha-Law				
Investme	ent history	N/A				



IntFlow Co., Ltd.

Preparing homepage

Company Identity

IntFlow is the next-generation AloT solution provider that applies the best artificial intelligence technology to the Internet of Things, eliminate inefficiency in the livestock industry and revolutionize the industry.

☐ Tech & Service Info

	■ Vis	sual Intelligence	elligence Sound Intelligence		☐ Language Intelligence	
Core Al	☐ Data Driven / Modeling			☐ Data Processing		☐ Hardware / Robotics
	☐ Rei	Reinforcement learning		☐ Autonomous driving		☐ AGI
	☐ AE] XAI		☐ Etc
Framework		Tensorflow 2.0, TensorRT		Data type & secure	Pigs' visu Pigs' aud	al data (self-gathering) io data (self-gathering)

Company's Core Al Explain

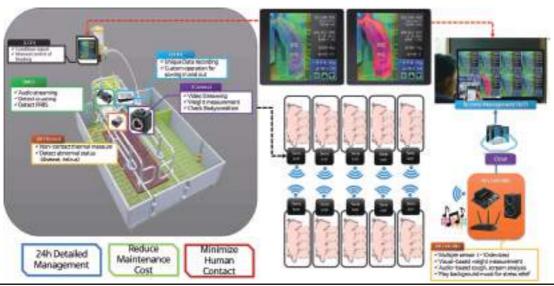
We have original technology for sound source separation using temporal activation U-Net (TAU-Net), which combines U-Net structure mainly used for medical image segmentation and time series adaptive learning structure based on non-negative matrix decomposition. By using TAU-Net, it is possible to separate sound sources that are robust to various environmental changes.

Product and Service Overview

Al Pig Manager: AloT device that manages, alerts and analyzes pig growth 24 hours a day

Product and Service Image

<Al Pig Manager for Sow>



- 2019.07.17.~19 Exhibited at the International Artificial Intelligence Show and won the Encouragement Prize at the Industrial Intelligence Startup Contest.
- 2019.08.27. Awarded the 1st place in Regional Qualification of Challenge! K-Startup Innovation Startup League (Gwangju)
- 2019.09.27. Established technical cooperation alliance among Wonwoo eng Inc., KICT, and IntFlow Co., Ltd.
- 2019.10.24. Installed prototype pig management device in Yeongam-gun farm of Seongil Livestock Farming Association









	Castomers	International: Fancom (Netherland), Alibaba (China), Cargill (USA)
Ī	Customers	Domestic: 선진포크, 도드람양돈농협, 다비육종, 양돈농가
	Target market	Domestic pig market (11 million heads, KRW 4 trillion) / Chinese pig market (400 million heads, 160 trillion won)
	Business model	HW installation and maintenance, licensing, farm management

- Measurement of productivity improvement before and after use of Al Pig Manager
- Acquire technical certification of Al Pig Manager
- Prepare to enter the Chinese market with Al Pig Manager

Name	IntFlow Co.,Ltd.	Establishment	In 2019	C.E.O	Kwang Myung Jeon		
Phone	Phone +82 62-573-4591		kmjeon@int-flow.com				
Main Busi	iness Field	Smart Farm					
Main Prod	uct and Service	Al Pig Manager					
Investmen	t history	N/A					



iSPD Co., Ltd.

www.ispd.co.kr

☐ Company Identity

iSPD Co.,Ltd. is one of the experts for Al Vision Recognition based on Smart Phone Camera. We have our own Al technologies such as Classification, Object Detection, Semantic Segmentation, OCR and so on. We serve O2O based Near-Field-Marketing platform and Al Camera APP Solutions.

□ Tech & Service Info

	■ Visual Intelligence		☐ Sound Intelligence		■ Language Intelligence
Core Al	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics
Core Ai	☐ Reinforcement learning		☐ Autonomous driving		■ AGI
	☐ AEI		☐ XAI		☐ Etc
Framework	Tensorflow Data		turo 01 cocurs	Videos, Images, (Optical)	
rramework			type & secure	Characters (Self)	

Company's Core Al Explain

 $\label{thm:decomposition} \mbox{Deep-Learning Based } \mbox{\em 1Classification, } \mbox{\em 2Object Detection, } \mbox{\em 3Semantic Segmentation, } \mbox{\em 4OCR}:$

Our Own Models

Product and Service Overview

- 1. SIGNet Model & Solutions
 - 1) O2O(offline-to-online) based Near-Field-Marketing Solutions. (Store/Signage Recognition Platform by Smart phones)
 - 2) SIGNet = OCR + Classification + Object Detection
 - 3) Competitors = GOOGLE LENS, NAVER SMART PLACE
 - 4) Vitalization Solutions of offline-stores and traditional market.
 - 5) 2 kinds of Related Patents (pending).

- 2. SFnet Model & Solutions
 - Real-time Recognition of objects/people and Automatic Background
 C.G effects by Smart Phone Cameras
 - 2) SFnet = Object Detection + Semantic Segmentation
 - 3) World-best inference time and Accuracy. (Improvement of Trade-off Issue)
 - 4) Competitors = NAVER B612, SNOW
 - 5) Al Camera APP service at Android and iOS on Y2020
 - 6) 6 kinds of Related Patents (pending).

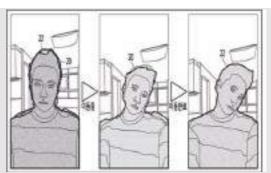


- 2018.11.29 2018 SCCEI Re-Startup Demoday 3rd awarded.
- 2019.03.18 Establishment of iSPD Enterprise Institute
- 2019.03.21 Registration of iSPD Enterprise Institute
- 2019.09.05 6 Patents applied for Sep. 2019 : Store/Signage/Objects/Person Recognition Al Technologies related Patents.









Business model License / Royalty					
Target market	Mobile-Marketing & Mobile-Payments market(size : USD 1,000				
Target market	Million/Y in korea)				
Customers Naver, Google, Tencent, Baidu etc.					
Future plan					

- 1) B2B business : Algorithms License and Investment from Naver, daum-kakao in korea, Baidu, Tencent in China, Google in USA
- 2) B2C business: Extra business by Al Camera APP and Store Recognition APP Services.

Name	iSPD Co., Ltd.	Establishment	In 2018	C.E.O	Paul Jung	
Phone	+82 10-9930-4800	E-mail	ispd_paul@outlo	ook.kr	_	
Main Business Field		1) O2O based Near-Field-Marketing Solutions, 2) Al Camera APP				
Main Product and Service		1) SIGNet model : O2O based Near-Field-Marketing Solutions / 2) SFnet model : AI Camera APP				
Investment history		2018 USD 50,000(Angel-Inv Venture Inverstn	300,000(KODIT) verstor) / 2019 nent Corp)	/ USD	2019 USD 100,000(Korea	

ILK PASPECTION

JLK Inspection, Inc.

www.jlk-inspection.com

Company	Identity
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An Al-based medical and security solutions manufacturer, JLK Inspection has developed medical image analysis and diagnostic-assisting systems, and X-ray security solutions based on artificial intelligence and image processing technologies, now moving into the global market.

Tech & Service Info

	■ Visual Intelligence	Intelligence		☐ Language Intelligence
Core Al	☐ Data Driven / Modeling	odeling		☐ Hardware / Robotics
Core Ai	☐ Reinforcement learning	☐ Autonomous driving		☐ AGI
	□ AEI □ XAI		☐ Etc	
Framework Company's own framework open-source framework are being used.		k and e	Data type & secure	Medical images and clinical data have been collected from more than 20 medical centers.

Company's Core Al Explain

With big data, expert knowledge, self-developed engine and algorithm technologies, JLK Inspection has developed medical image analysis and diagnostic-assisting systems, and X-ray security solutions.

Product and Service Overview

- 1) AlHuB: This Al all-in-one medical platform provides Al-based diagnostic assistance for 14 body parts and 37 diseases, using data such as X-ray, CT, MRI, MRA, CAM, mammography, ultrasonic, etc. from various medical imaging devices.
- 2) UNISTRO: This is an AI-based stroke total solution for the full cycle of diagnosis and treatment of patients from hyper acute stroke to acute stroke.
- 3) UNIPROS: This is an Al-based prostate cancer total solution for the full cycle of diagnosis and treatment of prostate cancer patients.
- 4) XINSPECTOR: This is an AI security solution which analyzes X-ray images for enterprises or public security in real time, automatically informs readers of items to be exposed, and maximizes security and reading efficiency.

Product and Service Image

UNISTRO, UNIPROS, XINSPECTOR (See Business Info)

- 2018.08 First-approved Al-based Class III medical device (by MFDS)
- 2018.11 The Minister of Health and Welfare Commendation
- 2018.12 First NET Certification for AI in medicine









Business model	Embedded, SaaS, HW Combination, License, etc
busiliess illouei	HW Combination, License, SaaS, etc.
	- JLK Inspection's products will expand their usage in domestic/overseas
	medical examination centers and large hospitals by quick commercialization
+	and localization.
Target market	- With a base of domestic MFDS approvals and overseas approvals
	including FDA, CE, and Southeast Asian countries, domestic/overseas
	product markets are going to be broadened by sales network.
	Korean National Tuberculosis Association, Seoul National University Bundang
C	Hospital, Samsung Medical Center, Asan Medical Center, Japan Nemoto
Customers	Hospital, etc. (Al medical), national core institutes, S-1 Corporation, etc. (Al
	security)

Future plan

- Developing innovative products, JLK Inspection is planning to expand its business into overseas markets as well as domestic markets.
- JLK Inspection is going to make close collaborations with various firms and institutions such as medical device manufacturers, large hospitals, etc.

Name	JLK INSPECTION	Establishment	In 2014	C.E.O	Kim Dongmin
Phone	+82-70-4651-4051	E-mail	support@jlk-i	nspection	n.com
Main Busi	iness Field	Medical and security X-ray image analysis system			
Main Pro	duct and Service	Medical and security X-ray image analysis system			
Investmen	nt history	37 billion KRW NH Investment	from KB Inves & Securities, a	tment, S and othe	L Investment,



Jobshopper

www.majormap.net

Company Identity

Jobshopper is an edutech company that is innovating career education using artificial intelligence technology. Based on natural language processing technology, we visualize data related to departments and jobs and provide anyone with access.

□ Tech & Service Info

	☐ Visual Intelligence		☐ Sound Intelligence		■ Language Intelligence
Core Al	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics
	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI
	□ AEI		□XAI		☐ Etc
Framework		Python / PyTorch Tensorflow Azure Science VM		Data type & secure	major curriculum text data (self)

Company's Core Al Explain

User-customized department recommendation, analysis of similarity between departments, recommendation of high school selection courses, analysis of recommended books by department

Product and Service Overview

Al-based department comprehensive platform









- 2017.11.02 2017 University Entrepreneurship Promising Team 300 Minister of Education Award
- 2018.11.29 SW Marketability Test Support Project Excellence Prize
- 2018.12.06 2018 Korea University SW University Entrepreneurship Competition Grand Prize
- 2019.05.08 Technology Venture Enterprise Certification
- 2019.07.19 2019 Industrial Intelligence Start-up Competition Excellence Prize
- 2019.08.01 2019 Anam-dong Campus Town Entrepreneurship Competition Gold Prize
- 2019.08.12 2019 Korean Public Intelligence Association Al-Tech Certification





Business model	Partial pay, target ads, and selling data
Target market	the 100 billion won admission consulting market
Customers	Parents and examinees, universities, and institutes

Future plan

In 2020, we aim to reach 500,000 users and want to move beyond Korea to global service. We are currently developing a Majormap of Vietnam and the United States, and ultimately we want to create a service that allows students from all over the world to compare with each other.

Name	Jobshopper	Establishment	In 2017	C.E.O	Kwon Ki Won
Phone	+82 70-4616-1515	E-mail ceo@jobshopper.co.kr		<r< th=""></r<>	
Main Business Field		Career Education / Admission Consulting based on Al / Education Target Advertisement			
Main Product and Service		Jobshopper / Majormap			
Investment history		N/A			



KaiPharm Co., Ltd.

www.kaipharm.com

Company	Identity
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KaiPharm will be a leading group of the next generation pharmaceutical industry as an Al-Data driven drug discovery company. We work on a KMAP project with mass production of drug-induced transcriptome, and have an original(US patented) drug virtual screening algorithm based on bioassay data.

Tech	ጼ	Serv	/ice	Info
I ECII	CΧ	3E11	/100	IIIIO

	☐ Visual Intelligence		☐ Sound Intelligence	☐ Language Intelligence
Core Al	☐ Data Driven / Modeling		■ Data Processing	☐ Hardware / Robotics
	☐ Reinforcement learning		☐ Autonomous driving	☐ AGI
	□ AEI		□XAI	■ Etc
Framework		TensorFlow, Keras	Data type & secure	Drug-induced Transcriptome (self), Bioassay (self, public)

Company's Core Al Explain

KaiPharm Co., Ltd. develops unique drug virtual screening algorithm based on big data and artificial intelligence and provides comprehensive drug discovery solution. We build a multifaceted, integrated database of compound structures, drug-target relationships, drug-disease relationships, drug-induced transcriptome, and have unique data mining technologies. In-house database is the basis for developing artificial intelligence algorithms and providing complex solutions.

One of the main project, KMAP, is to produce large drug-induced transcriptome by the next generation sequencing (NGS) and to find repositioning drugs. The KMAP use the method from the publicly available drug transcriptome pattern analysis (CMAP analysis), but expands the scope of analysis and increases the prediction accuracy because it not only produces proprietary data on its own, but also overcomes existing public data limitations by measuring the entire genes' expression (21,000). We has conducted Internal researches for many years and accumulated analytical know-how.

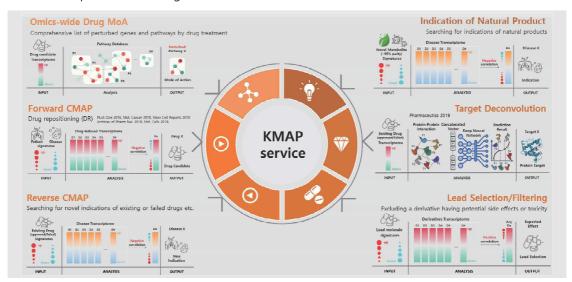
Secondly, for drug virtual screening service, we have two algorithm patents: BEAR registered in US & Korea, BACON registered in Korea. These algorithms are unique technique that uses only large-scale drug screening data(bioactivity) without using any structural information on the compounds and targets. Uniqueness has been achieved through machine learning formula developed in-house, and the accuracy of prediction is improved by analyzing large data.

Product and Service Overview

drug discovery from drug-induced transcriptome analysis (platform service) data mining of drug screening big-data and drug virtual screening service



- Cooperative R&D Agreement with Institut Pasteur Korea



Business model	Platform service + IPO					
Target market	Al driven drug discovery market / estimated at approximately \$2.63 million					
Customers Drug discovery researching Institute/University / Pharma.						
Future plan						

For the next year, KMAP global service Launch / KMAP alpha test

Name	KaiPharm Co., Ltd.	Establishment	In 2018	C.E.O	Wankyu Kim		
Phone	+82-2-3277-4294	E-mail	contact@kaipharm.com				
Main Business Field		Drug discovery					
Main Product and Service		KMAP, BEAR					
Investment history		100 million won (KBI, '18) 235 billion won (12 angel investors, '19) 500 million won (KBI, '19) 500 million won (Institut of Pasteur Korea, '19) ~4,000 million won (series A, '19 Nov.)					



https://kono.ai

Company Identity

Create and provide Al-based schedule management services, Kono. We are a company that uses artificial intelligence and big data technology to help professionals around the world be happy and productive.

□ Tech & Service Info

	☐ Visual Intelligence		☐ Sound Intelligence			■ Language Intelligence		
Core Al	☐ Data Driven / Modeling		■ Data Processing			☐ Hardware / Robotics		
Core Ai	■ Reinforcement learning		☐ Autonomous driving)	☐ AGI		
	□ AEI		□XAI			☐ Etc		
Framework		Tensorflow + BERT mo dels, CNN/RNN models for action prediction		Data type & standard secure anor		eeded industry security dards by using nymization, encrypted nections, etc		

Company's Core Al Explain

Multiple natural language(text) understanding and context prediction based on user behaviors on calendars.

Product and Service Overview

All-in-one scheduling service for enterprises by providing seamless connection between communication tools and internal system. Scheduling appointments anytime on your own email and messengers.



- Patented techs (4 registered, +10 pending)
- Backed by 500Startups & Techstars
- Techcrunch pitch off in Seoul 1st Winner
- Grand prize from Korea Brand Award
- Achieved ISO 27001/27018









Business model	SaaS			
Target market	Enterprise Al SaaS & RPA Market / \$130B Global SaaS, \$3B of			
Target market	AI/RPA			
Customers	SK Telecom, KEB HanaBank, Hyundai Card, WeWorkLabs, etc			
Future plan				

- Recently added Kono for Teams
- Start to sell product online
- Planning to add more skills based on its own NLU + Kono API engine

Name	Konolabs	Establishment	In 2014	C.E.O	YJ Min
Phone	+82-10-9336-9804	E-mail contact@kono.ai			
		SaaS: Schedule and reservation of companies and individuals			
Main Prod	duct and Service	Kono : Al Appointment Scheduling for Enterprises			
Investmen	nt history	Accumulated \$1M from accelerators and angel investors			angel



Korea Al Technologies Co.,Ltd.

www.koreaai.com

Company Identity

Korea Al Technologies Co., Ltd. is a Korean leading fintech company. It is the first of its kind, providing big data processing and its own classified Al algorithm technology. Korea Al Technologies Co.,Ltd. is capable of accurately predicting the stockmarket index. The algorithm's performance to accurately predict the stock market far surpasses previous other method of prediction.

The company has successfully developed an automated asset management system that manages stock funds and it is capable of generating high return without any risks.

☐ Tech & Service Info

	☐ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
Coro Al	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
Core Al Reinforcement		inforcement learning	☐ Autonomous driving		☐ AGI	
	□ AEI		■ XAI		■ Etc	
Framework		Hidden Layer units		Data type &	Data Mining by Stock Brokerage companies HTS	
riaillewo	IK	(input-output layer)	secure	Brokerage companies HTS	
Company's Caro Al Evolain						

Company's Core Al Explain

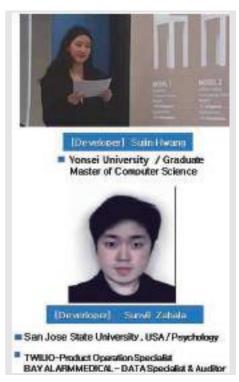
- Continuous processing by self function of global stock data 24 hours a day
- 4,500 instantaneous machine learning & iterative testing of AI engines in 7minutes, and a function of accurate predictive direction using cross-pattern recognition

Product and Service Overview

- Product name: KAIBOT-90 Al Automated Asset Management System
All orders are unmanned and automated, with a 90% forecasting probability in the stock market, without loss. It mechanically achieves an investment return of around 20% per month, and It is supplied to an asset management companies and entities.







Business model	The asset management business is on the verge of being transferred to robots. Our AI technology is leading the way.			
Target market	1.8 trillion dollar asset management depository in Korea			
Customers	Asset management companies in Korea and all around World			
Future plan				

•

- Asset Management Company to be established
- Seeking overseas advancement under these business model

Name	Korea Al Technologies	Establishment	In 2016	C.E.O	Chulhwa Jung	
Phone +82 33-672-0784 E-mail		koaitech@naver.com				
Main Business Field		Development & Supply of Artificial Intelligence Programs				
Main Product and Service Name		KAIBOT-90 AI Automated Asset Management System				
Investment history		N/A				



LaonPeople Inc

www.laonpeople.com

	Company	Identity
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LAON PEOPLE Inc., which has a goal to make people and community happy with the leading state of the art technology, is a specialized company in Al Vision Inspection Solutions. With our own developed technologies such as Artificial Intelligence Vision Inspection Solution, Machine Vision Camera, Barcode Reader, and Camera Module Inspection Solution are recognized as the best in its superior quality and safety globally. To open the next smart era with passion and challenge, with our Al Vision, LAON PEOPLE always be with customers.

Tech & Service Info

	■ Visual Intelligence	☐ Sound Intelligence	☐ Language Intelligence	
Core Al	\square Data Driven / Modeling	☐ Data Processing	■ Hardware / Robotics	
Core Ai	■ Reinforcement learning	☐ Autonomous driving	☐ AGI	
	☐ AEI	□XAI	☐ Etc	
Framewo	rk Caffe, Tensorflow	Data type & secure	Video and image files	

Company's Core Al Explain

NAVI AI, can perform in impossible areas with conventional ruled-base inspection method such as atypical objects, damages, cracks, stain detection, pattern matching in complex background and OCR. Even if a new failure type has occurred, it can be found and detected simply by learning additional defect images with the Trainer. This helps you to save time and money because there is no additional development or necessity for a new vision system configuration.

Product and Service Overview

- Atypical defect inspection
- Reduce period for solution importation
- Save the Cost
- Solve quality deviation issue

Product and Service Image



<Machine Vision H/W>



<Machine Vision S/W>

- 2019. 08. Awarded the Industry Badge in the Innovation Technology Show 2019
- 2019. 10. Received Prime Minister's Award in 2019 TECH INSIDE SHOW









Business model	Al Machine Vision H/W, S/W
Target market	Al Machine Vision Market(14.4 trillion dollars)
Customers	SAMSUNG, LG, SK, HUAWEI

Future plan

Artificial Intelligence Traffic Solution(Greenlight AI)

- Real-time traffic analysis
- Real-time control traffic signal
- Reduce traffic congestion
- Traffic policy advisor

Name	LaonPeople Inc.	Establishment	Lee, Sukjoong		
Phone	+82 1899-3058	E-mail sales@laonpeople.com			
Main Business Field Al Machi		Al Machine Visio	n H/W, S/W		
Main Product and Service Smart Factory, Smart City, Factory Automation			ation		
Investment history		Listed on KOSDAQ			



Law&Company Inc.

www.lawtalk.co.kr

Company I	deni	titv
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Law&Company operates the biggest legal service platform, LawTalk(lawtalk.co.kr). The company is doing research into text mining, data processing and reinforcement learning based on property of text-heavy legal contents which has standard patterns. It plays a leading role in popularization and modernization of legal service in Korea.

□ Tech & Service In	ITC	О
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	☐ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence
Core Al	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics
Core Ai	■ Reinforcement learn		☐ Autonomous driving		☐ AGI
	☐ AEI		□ XAI		■ Text Mining
Fuerra estra ula	TensorFlow, Data		type &	Legal contents	
Framework	PyTorch	se	cure	(Consultation cases, Precedents etc.)	

Company's Core Al Explain

Plans to develop intelligent law discovery and legal reasoning services through deep learning-based automated law knowledge mapping

(Used in keywords, advertising services, problem solving costs, prediction services, similar cases, search services, etc.)

Product and Service Overview

- Recommendation service: The platform service recommends optimal lawyers and legal contents to solve user's legal problem based on Natural Language Processing and Machine Learning Algorithm.
- Guide Chatbot service: The platform service provides Chatbot to guide users for easy and better experience in the service
- Document automation service: Automated document builder makes legal documents such as contract, accusation based on Q&A interaction with users



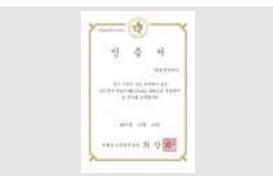


- -2019.07.26 Law & Company Jung Jae Sung Vice President & Kim Bon Hwan \pm President
- -2014.09.24 Awarded the Grand Prize at the 2nd Warm Technology & Idea Contest
- -2015.12.24 Selected as a promising company (K-Global 300) by the Ministry of Science, ICT and Future Planning









Business model	Advertisement and solution business on Legal service platform
Target market	Legal service transaction market in Korea / 7.5 trillion won
Customers	Lawfirms and lawyers in Korea

Future plan

The company is also planning to develop a service that utilizes artificial intelligence (AI), which is considered to be a constant in the field of legal technology. The development of AI analysis engine, which enables the real-time analysis of accumulated case counseling and big data through the LawTalk service, is a priority.

Name	Law&Company Inc.	Establishment In 2012 C.E.O Kim, Bonhwa					
Phone	+82 2-3477-0622	E-mail js.jung@lawcompany.co.kr					
Main Busi	ness Field	Legal service platform					
Main Prod	duct and Service	LawTalk - https://www.lawtalk.co.kr					
Investmen	t history	14 billion won (Series B) in 2019 (Total 18 billion won)					



LOCS, Inc. www.locslab.com

Company Identity

LOCS aims to understand people's inconvenience and improve the quality of human life by solving problems with Al. We provide services that help you well understand each other on SNS based on Al technology.

□ Tech & Service Info

	☐ Visual Intelliger	nce	Sound Intelligence	La	anguage Intelligence	
Coro Al	Core Al Data Driven / Modeling		☐ Data Processing		ardware / Robotics	
Core Ai	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI	
	AEI		XAI	□ Et	:c	
Framework PyTorch, Tensorflow Data type & secure text files(self)						
Company's Core Al Explain						

Emotional analysis, intention classification and clustering on unstructured SNS text data, and SNS contents recommendation based on trend keyword analysis

Product and Service Overview

Psychic Digger enables the creators to communicate with subscribers well and manage their channel growth based on the curation information of the channel. Also, it recommeds the next content idea to creators.











Business model	Subscription
	The target market is influencer SNS management and marketing
Target market	market. The market size is 500 million dollors in Korea and 3,709
	million dollors in overseas market.
Customers	Influencers, MCN

Future plan

After launching the official service in May 2020, we are going to expand to help grow of influencers around the world, starting with entering the US market in 2021

Name	LOCS, Inc.	Establishment	In 2017	C.E.O	Kim Ji Hyun	
Phone	+82 51-518-2021	E-mail locs.contact@gmail.com				
Main Busi	iness Field	Time series Recommendati		Unstructured	data analysis,	
Main Prod	duct and Service	Psychic Digger				
Investmen	t history	N/A				



Lomin inc.

lomin.ai

Co	mpa	any	Ide	ntity

Lomin Inc. solves various business problems with world-class computer vision technology. Lomin's AI technology, which has been awarded the Minister's Award for two consecutive years at the AI Challenge hosted by the Ministry of Science and ICT, provides customers with solutions such as text recognition in wild scene and video personal information de-identification based on high reliability.

Took	0	Service	Info
Tecn	Čί	Service	INTO

	V	■ Visual Intelligence		nd Intelligence	☐ Language Intelligence
Cono Al	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics
Core AI		einforcement learning	☐ Autonomous driving		☐ AGI
	□ AEI		☐ XAI		☐ Etc
Framework PyTorch, Tensorflow,		sorRT	Data type & secure	image files (self)	

Company's Core Al Explain

- -Scene Text Detection & Recognition: Technology that detects the position of characters with various languages, sizes and directions in a general image and recognizes the characters as end-to-end
- -Face Detection & License plate detection: 99% accuracy in detecting faces and license plates in the image

Product and Service Overview

- 1. Textscope: A character recognition solution that accurately detects and recognizes various types of Hangul, English from images of everyday life without constraints on the shooting environment (Demo video: http://ocr.lomin.ai).
- 2.VIP (Visual Identity Protector): A solution that automatically detects and masks faces, license plates, and personal information texts included in images and videos. This solution can be used for removing personal information in image dataset annotation, video editing/broadcasting, document image processing, big data collection, CCTV video export and etc.
- 3.Fake Face Detector (FFD): The world's first commercially available artificial intelligence face detection solution. This solution detects forgery with high accuracy for facial images created with AI technology or manipulated with image editing programs.

Product and Service Image



Textscope:

Visualization of text detection results of street scene image

- 2018.05.01. Lomin Inc. Establishment
- 2018.06.18. SNU-Gwanak Tech Valley Audition Season 2 Excellence Award
- 2018.11.29. Al R&D Challenge, 2nd place (Organized by the Ministry of Science and ICT)
- 2019.07.12. AI R&D Grand Challenge Text Recognition track, 1st place









Business model	Software License Sales, API Services					
Target market	-Personal information de-identification solution for CCTV and image data annotation market/Domestic market size expected to reach 24 billion won by 2022 -Insurance claim process automation solution for insurance companies/Domestic insurance claim: 30 million cases annually, which costs 150 billion won per year to process claims					
Customers	Financial companies, CCTV solution companies, fintech companies					
	Future plan					

Future plan

- -Development of general document recognition solution based on our text recognition technology
- -Development of RPA solution for banks and insurance companies based on document recognition technology
- -Sales of video personal information de-identification solution to CCTV control centers

Name	Lomin Inc.	Establishment	Jihong Kang					
Phone	+82-2-6331-1853	E-mail	jh.kang@lomin.ai					
Main Business Field Software / Program development								
Main Product and Service 1. Scene Text Detection & Recognition 2. Visual Ide Protector 3. Al Medical Imaging Analysis 4. FFD					on 2. Visual Identity ysis 4. FFD			
Investment history N/A								



Macroact Inc.

www.macroact.com

		Company	Identity
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Through AI in robotics we develop a learning platform for robot motion control and beside that develop an intelligent companion robot.

Tech & Service Info

	☐ Vis	sual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
Core Al	☐ Data Driven / Modeling			☐ Data Processing		■ Hardware / Robotics	
☐ Reinforcement		nforcement lear	rning Autonomous driving		☐ AGI		
	☐ AEI] AEI		□ XAI		☐ Etc	
Framework PyTorch Date		Data	type & secure	Specific	cations of robot parts(self)		
C		A1					

Company's Core Al Explain

First it converts the output range guaranteed in the specifications of each component into training data, from which RAIMS learns the most basic movements, and then learns how to control each component to handle randomly assigned tasks so that users can efficiently perform various tasks.

Product and Service Overview

- 1. Platform for learning and self-optimizing robot behavior control
- 2. A virtual companion robot learns basic movements, and cognitive abilities on the platform
- 3. Mounting the learning outcomes to the real robot
- 4. Users apply personally desired functions to their companion robots on the platform



- 2019.08.12. Patent registration
- CEO Euihyeoc Kang
- COO Marie Christine Kang







Business model	HW Combination
Target market	Companion robot / the market is still small, but it's rapidly growing with an increase in single-person households and silver generation
Customers	B2C. The younger generation in their 20-30's and silver generation

Future plan

- 1. Crowd funding
- 2. Quality improvement
- 3. Humanoid Development

Basic

Info

Name	Macroact Inc.	Establishment	In 2019	C.E.O	Euihyeoc Kang	
Phone +82 70-9086-6514		E-mail	lihak@macroact.com			
Main Business Field		Robot manufacturing, Software Development				
Main Pro	duct and Service	Companion robot Coco, Robot Al Motion Control Platform				
Investmen	nt history	None				

makina Rocks Makina Rocks

ww.makinarocks.ai

Company Identity

Development of industrial specific Al solutions & platforms that resolve manufacturing issues such as improvement in yield and process optimization through analysis of data from production equipment, processes and products of manufacturing companies

☐ Tech & Service Info

	☐ Visual Intelligence	☐ Sound In	telligence	☐ Language Intelligence
Core Al	■ Data Driven / Modeling	■ Data Pro	cessing	☐ Hardware / Robotics
	■ Reinforcement learning	☐ Autonom	ous driving	☐ AGI
	☐ AEI	☐ XAI		☐ Etc
			Collaboration	of joint Al
Framework	Pytorch and etc	Data type & secure	development with top-tier	
		& secure	manufacturers in target industries	

Company's Core Al Explain

Technologies and capability to develop customized AI algorithm and engine based on 4 core learning such as deep learning, continual learning, reinforcement learning and active learning and 4 core applications such as novelty detection, root cause analysis, time to failure and process optimization

Product and Service Overview

- 1. Operational AI platform that helps the deployment of pre-developed AI models
- 2. Al based industrial robotic arm PdM solution
- 3. Al based Semicon equipment PdM solution

Product and Service Image

OUR PRODUCTS

Operational At platform and industry solutions to solve industry-specific problems in a sestionable way



Industry Solutions (for Semiconductor, Auto, Battery) & Operational Al Platform



Team

Business model	Consulting and license
Target market	Al x Manufacturing market / 17B USD in 2025 20
Customers	Global leading semiconductor equipment manufacturer, Car maker
Customers	and etc.
	_ , _ ,

Future plan

Focus on collaboration with top-tier manufacturer for tech development and validation until 2021 and transform biz model by launching verified industrial AI solution and platform

Name	MakinaRocks	Establishment	In 2017	C.E.O	Andre S. Yoon,	
Ivairie		Establishment		C.E.O	Jaehyuk Lee	
Phone	+82 10-4148-1312	E-mail	contact@makinarocks.ai			
Main Business Field		Manufacturing and energy industry efficiency (predictive maintenance, optimization and defect detection)				
Main Product and Service		Industry Solutions (for Semiconductor, Auto, Battery) & Operational Al Platform				
Investment history		900M KRW (SK Telecom 2018), 500M KRW(Naver 2018), 400M KRW(L&S Venture Capital 2018)				



Mayplus

www.mayplus.co.kr

Company Identity

As an artificial intelligence image processing company, we research the images of drone, CCTV, blackbox. And OCR, too. We mainly detect Object, Motion, Emotion and challenge the drone's autonomous flight.

□ Tech & Service Info

	■ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
Coro Al	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
Core Al	☐ Reinforcement learning		■ Autonomous driving		□ AGI	
	□ AEI		□XAI		☐ Etc	
Framework		Tonsorflow - DyTorsh		Data type &	Movies of Drone and	
riainewo	IK	Tensorflow + PyTore		secure	Blockbox	
Company's Core Al Evolain						

Company's Core Al Explain

Basic level of fine-tuning of Yolo, RCNN, Inception. It is a small company that has not yet reached the commercialization stage.

Product and Service Overview

We are speeding up algorithms that detect specific people through drones or CCTV images and allow drones to autonomously fly and multiflight.



Used Free Image

Business model	
support in real time	
Currently aims at 100 million won of annual sales in the	
Target market domestic market	
Customers under construction	

Future plan

We are aiming for government R&D projects in 2020. The goal is to gain performance first with small projects and then with smaller fixed customers.

Name	Mayplus	Establishment	In 2018	C.E.O	Woo Jae-Hyeon	
Phone +82 10-6281-8632		E-mail	bull0330@snu.ac.kr			
Main Business Field		Image Processing, Object Detection				
Main Product and Service		under construction				
Investmer	nt history	under construct	ion			



MEDICAL IP

www.medicalip.com

Company Identity

Al based medical image analysis has more advantages for enhancing performance, efficiency and quality compare to its conventional counterparts. Also, medical images can be processed to be more understandable and useful by regional segmentation which dividing images into set of voxels. Medical IP can extract various information from images more accurately in seconds which cannot be done in conventional method. This is achieved via privately developed medical image analysis technology and AI of Medical IP with best clinical researchers involved.

Tech	&	Service	e Info
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Core Al		■ Visual Intelligence	☐ Sound Intelligence	☐ Language Intelligence
	Como Al	☐ Data Driven / Modeling	☐ Data Processing	☐ Hardward/Robotics
	Core Ai	☐ Reinforcement Learning	☐ Autonomous Driving	□ AGI
		☐ AEI	□ XAI	☐ Etc
Framework		MEDIP(private framewor	Data type & secure	medical image

Company's Core Al Explain

Medical IP owns AI based medical image processing software called MEDIP which can perform resolution enhancement, segmentation, registration, texture analysis and multi-dimensional image reconstitution.

Product and Service Overview

①MEDIP

Convert 2 dimensional images acquired from CT & MRI into 3D based anatomical organ images to figure out the locations and sizes of affected areas and tumors more conveniently and accurately.

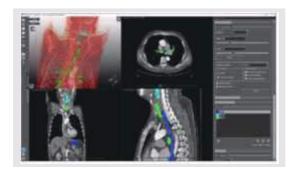
②ANATDEL (Anatomical Model)

Medical 3D additive manufacturing is used to print out models with resembling texture and size of actuall organs

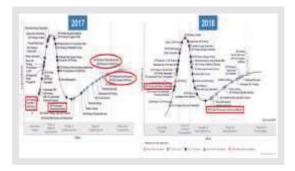




Business









Business Model	SaaS, RnD
Target Market	Hospitals, research institutes, medical schools / Sales target of 20 billion
raiget warket	KRW in 3 years
Customers	Medium and large hospitals including Seoul National University Hospital

Future plan

- Strengthening global reference by participating Al academic exchange and exhibitions in US
 MEDIP, Al, 3D print and VR technology will be supplied to Xi'an international medical center. Business in China will be expanded through big data platform based on Data Science and 3D medical images.
 Establishing advanced medical systems such as telemedicine and Al service throughout China
 KOSDAQ IPO in 2 years

Name	Medical IP	Establishment	In 2015	CEO	Park, Sang Joon	
Phone +82 2-2135-9148		E-mail	contact@medicalip.com			
Main Business Field		Deep Learning Development on Medical Imaging				
Main Product and Service		MEDIP, ANATDEL				
Investment history		 ✓ Apr 2017 : Series A (KRW 1 billion) from Sejong Ventures ✓ Feb 2019 : Series B (KRW 5 billion) from Starset, SJ, Neoflux ✓ Additional investment of KRW 2~3 billion and KOSDAQ IPO in 2020 are expected 				



MEDIRITA Inc.

ww.medirita.com

Company Identity

MEDIRITA is an artificial intelligence company founded in 2018. Its artificial intelligence technology provides a fast, low-cost solution for the development of new drugs that can treat a variety of diseases, including rare diseases. We aim to contribute to the healthy life and happiness of human by growing as a global artificial intelligence hub of the pharmaceutical industry for the development of new drugs.

□ Tech & Service Info

Core Al	☐ Visual Intelligence	☐ Sound Intelligence	☐ Language Intelligence
	☐ Data Driven / Modeling	■ Data Processing	☐ Hardware / Robotics
	☐ Reinforcement learning	☐ Autonomous driving	■AGI
	☐ AEI	XAI	☐ Etc
Framework Multiscale Network Framework		work Data type & sec	cure OMICS data

Company's Core Al Explain

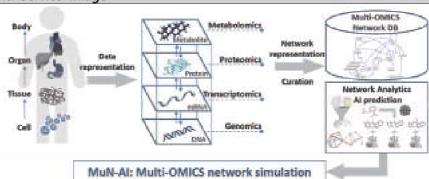
We developed network analysis indices based on network medicine theory. These analytical indicators define nodes and edges for network configuration to enable computer simulation of the drug response path. It extracts the data required for knowledge network construction from the global public OMICS databases, changes it according to the standard, and builds it as a network database. It learns data based on information search and data refinement technology, and helps to predict the structure, features, efficacy and safety of new drug candidates.

Product and Service Overview

Provision of multi-omics network database discovery service

New Drug Development Network Analysis and Association Analysis Service

Providing predictions on the structure, properties, efficacy and safety of new drug candidates.



- 2019.11.05. 2019 Korea Al Award Startup





Business model	Software license and milestone contract for new drug candidates			
Target market	Drug Discovery Informatics / 2B\$			
Customers	Pharmaceuticals and Bio company			

Future plan

We plan to contribute to the development of open innovation ecosystem for drug development to utilize, and collaborate with pharmaceutical bio companies to verify and develop A.I. technology.

Name	MEDIRITA Inc.	Establishment	In 2018	C.E.O	Pae, YoungWoo		
Phone +82 2-890-0779		E-mail	info@medirita.com				
Main Busi	iness Field	Al solution for	Al solution for new drug discovery				
Main Product and Service MuN-Al (Mul-			ti-omics Network AI)				
Investment history		Processing					



Medi Whale Inc.

www.medi-whale.com

Company Identity

We are offering AI that can predict various systemic risk factors from the retina.

Our AI enables us to predict Cardiovascular/Cerebrovascular Diseases, Diabetic Mellitus and Sarcopenia and Kidney Function through simple fundus photographs.

☐ Tech & Service Info

Coro Al	■ Visual Intelligence	☐ Sound Intelligence	☐ Language Intelligence	
	■ Data Driven / Modeling	☐ Data Processing	☐ Hardware / Robotics	
Core Al	☐ Reinforcement learning	☐ Autonomous driving	☐ AGI	
	☐ AEI	■ XAI	☐ Etc	
Framework	TensorFlow, PyTorch	Data type & secure	Hospital MoU &	
	Terisorriow, Pyroicii	Data type & secure	Agreement	

Company's Core Al Explain

Cardiovascular Diseases(CVD) prediction based on retinal imaging analysis

- Imaging analysis for Ophthalmic images
- Serial analysis for check-up result
- CVD Prediction AI XAI

Product and Service Overview

Medical AI solution to predict Cardiovascular Diseases & Cerebrovascular Diseases, Chronic Diseases using simple fundus photography.



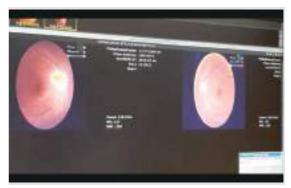
- (Korean) 2 Patents, (US) 1 Patent Registration. + 40 Patents Publishment











Business model	SaaS			
Target market	Korea, Jakarta, Vietnam, India			
Customers	Jakarta Eye Center, Hanaro Medical Center, Philip Medical Center,			
Customers	Chaum Check-up			
Future plan				

Deployment of our automatic eye and heart screening system in Asian clinics. Advancing our AI screening system's area to chronic disease diagnosis.

Name	Medi Whale Inc.	Establishment	In 2016	C.E.O	Kevin Taegeun Choi	
Phone +82 70-7847-8780		E-mail info@medi-whale.com				
Main Business Field		Al diagnosis device (or support) for Cardiovascular Diseases, Ophthalmic Diseases				
Main Prod	duct and Service	DrNoon for Heart Screening, Fundus Screening				
Investment history		USD 250K(B&V Partners, '19)	it Eye Clinic,	. '18), L	JSD 170K(Innopolis	



MINDsLab

www.mindslab.ai

Company Identity

'MINDs Lab is an AlaaS(Al as a Service) Firm equipped with cutting-edge Artificial-Intelligence technology. MINDs Lab provides Al solutions and SaaS based Al services such as Education Al, Al Contact Center, and API Services through various types of Al engines with its Al Platform, 'maum.ai'. Our product is recognized by government departments, global press and the media including International Telecommunication Union, Forbes Asia.

☐ Tech & Service Info

Core Al	■ Vis	■ Visual Intelligence		☐ Sound Intelligence		■ Language Intelligence	
	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics		
	■ Reinforcement learning		☐ Autonomous driving		☐ AGI		
	☐ AEI		□ XAI		□ Et	:c	
Framework maum.ai (cloud s		rvice)	Data type & sec	ure	SaaS Service		

Company's Core Al Explain

'maum.ai – Al as a Service platform where you can enjoy variable Al engines and apply them easily. maum.ai represents our new service model- AlaaS. Minds Lab has developed various kinds of Al engines, including STT(Speech to Text), TTS(Text to Speech), MRC(Machine Reading Comprehension), XDC(eXplainable Document Classifier) and so on. Rather than providing each engine as a packaged application, now we provide the Al engine itself as a service.

Product and Service Overview

- *General user can come to our platform and create their own voice generation engine within an hour.
- *Users can experience the great AI easily with a small amount of payment.
- *Users can create new media creative contents such as YouTube.



- Best Innovative Exhibitor within each National Pavilion at ITU Telecom World '17
- Forbes, 10 South Korean Startups Breaking out in 2017
- Prime Minister Prize 4 years in a row
- Mindslab Eco Project









Business model	Al Platform 'maum.ai'			
Target market	B2B/B2C Market			
Customers	Small businesses to large corporations who want to integrate			
Customers	maum.ai's AI engines into their service			
Future plan				

MINDsLab plans to organize EcoMINDs network with startups who wants to apply Al into their service and works with companies with different specialties.

Name	MINDsLab	Establishment	In 2014	C.E.O	Taejoon Yoo	
Phone	+82 31.625.4340	E-mail	-mail hello@mindslab.ai			
Main Business Field Al Platform						
Main Product and Service Al Platform 'n			aum.ai'			
Investment history Total Investment			nt 22.2 M(\$)			



MNEMOSYNE SOLUTIONS

http://jsteem.com

Company Identity

We have developed the MNEMOSYNE Algorithm for AI publish and distribute books on them, and research how to use them. We are applying for patent of this algorithm and creating 'IGD DB system' which improves DB search speed. The company is small, but it's worthy as a developer of in-house developed algorithms.

□ Tech & Service Info

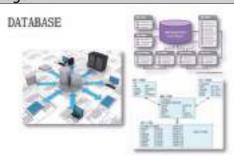
Core Al	☐ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
	☐ Reinforcement learning		☐ Autonomous driving		■ AGI	
	□ AEI		□ XAI		E E	tc
Framework		MNEMOSYNE algo	rithm	Data type & seco	ure	Self

Company's Core Al Explain

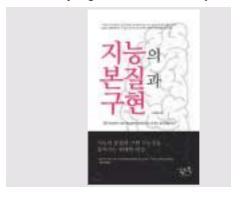
MNEMOSYNE is a non-statistical, non-probabilistic, intuitive, deterministic algorithm. You can explain that when you give a command, you infer the memory and execute it. We are working with several laboratories. We are also planning to replace existing data with intelligent databases.

Product and Service Overview

We have developed the MNEMOSYNE Algorithm for AI publish and distribute books on them, and research how to use them. We are applying for patent of this algorithm and creating 'IGD DB system' which improves DB search speed. The company is small, but it's worthy as a developer of in-house developed algorithms.



 \checkmark 2019. The book published by the company was selected as 'the good book Sejong recommended by the government'.





Business model	DB system			
Target market	Entered DB system market with 'IGD' applying Nimashini			
	algorithm. Domestic market size is 530 billion won			
Customers	startups			
Future plan				

We will collaborate with an event or organization for initial startup to promote the IGD system.

Name	MNEMOSYNE SOLUTIONS	Establishment	In 2018	C.E.O	JAE-HYUN LEE	
Phone	+82 10-9000-6260	E-mail jaehyunlee25@gmail.com			l.com	
Main Business Field		SI, book publishing, DB system				
Main Product and Service		- IGD (DB systen - MNEMOSYNE a - MNEMOSYNE a implementation	n) algorithm algorithm, of intelligo	'The nature ence(book)	e and	
Investmen	t history	N/A				



MOBILTECH Co., Ltd.

mobiltech.io

Company	Identity
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MOBILTECH is spatial information and perception tech startup. Our main business is 3D scanners, HD maps, and smart security solution. We use Al in every business area. The Al sorts the objects scanned by our scanner, inputs the necessary elements on the map, and monitors the space safely instead of the person.

☐ Tech & Service Info

	■ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
Carra Al	☐ Data Driven / Modeling		■ Data Processing		■ Hardware / Robotics	
Core Al	☐ Reinforcement learning ■ Auto		itonomous driving	☐ AGI		
□ AEI			□XAI		☐ Etc	
Framework	Tensorflow, Pytorch Data type & secure		•	•	Semantic Segmentation data collection vehicle	

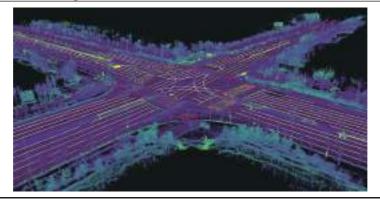
Company's Core Al Explain

MOBILTECH develops and possesses AI technology to efficiently process 3D spatial information. For example, MOBILTECH has technologies for automating the extraction of elements needed for HD maps. The technologies include extracting objects of interest such as signs and traffic lights from photo data, obtaining their coordinates, and automatically registering the extracted information on HD maps.

Product and Service Overview

MOBILTECH HD Map

- -High precision 3D map with road information needed for autonomous driving
- -Based on scanned data with XL-Replica, in-house developed 3D scanner of MOBILTECH
- -30~90% time savings compared to manual work by processing road data with AI
- -Currently used by various autonomous driving companies in Korea and Silicon Valley



- 2019.11.01. Won Technology innovation Award at Pangyo Autonomous Motor Show
- 2019.11.01. Now waiting for 9 patent applications









Business model	(Short-term) Data Sales (Long-term) License		
Target market	Autonomous Driving(\$20.1B) / Smart City(\$223.3B)		
Customers	confidential		

Future plan

- Expand references for autonomous vehicle
- Expand HD map service area in cooperation with robot taxi companies

Name	MOBILTECH Co., Ltd.	Establishment		In 2017	CEO	Jason Kim
Phone	+82-2-6380-0412	E-mail info@mol		biltech.io		
Main Business Field Autonomous Driving / Smart City / Security		curity				
Main Product and Service		MOBILTECH HD Map / Replica City / D Plus View				
Investment History		- ₩0.2B (Naver, '18) - ₩0.2B (Hyundai Motor Group, '18) - ₩0.5B (TIPS, '19) - ₩1B (Woori Bank, '19)				



Mondrian Al

https://mondrian.ai

Company Identity

Mondrian Al leverages its expertise in big data, artificial intelligence, and data visualization to drive data-driven innovation in various industries.

☐ Tech & Service Info

Core Al	■ Visual Intelligence	☐ Sound Intelligence	☐ Language Intelligence	
	■ Data Driven / Modeling	☐ Data Processing	☐ Hardware / Robotics	
	☐ Reinforcement learning	☐ Autonomous driving	■ AGI	
	□ AEI	□XAI	☐ Etc	
Framework	Tensorflow, Keras, Caffe, C	affe2 Data type & secur	Different ways from project to project.	

Company's Core Al Explain

We have our own artificial intelligence algorithms for analyzing time series data and predicting process quality in the factory. Also, have Al Box (Deep Learning / Machine Learning Research Workstations) products that Include H/W and SW in packages for artificial intelligence research

Product and Service Overview

- 'Al Playground' Multi-user platform for Al algorithm development.
- 'Vision Factory' Non-invasive smart factory monitoring tool
- 'Mondrian Workstation' Special-purpose workstation for AI and big data
- 'Data Catalog' Public Data Sharing Platform





Al Playground

6 83

Vision Factory



Mondrian Workstation

Data Catalog

- 2017.12 K-Global 300 Department of Government Administration and Communications ICT Prospective Companies Selection





	Provide solutions and systems, including technical consulting, to		
Business model	companies struggling with the adoption of expertise in artificial		
	intelligence, big data, and data visualization.		
Target market	 1) Domestic Service linkage with public Al curriculum and courses Data analysis platform for universities and graduate school Data center operations for enterprises and research departments Expansion to a platform for civil contest/competition 2) Overseas Demand from developing Asian countries that are investing in future industrial education 		
Customers KT, Orion, Incheon Metropolitan City, Seoul Metropolitan Governed Incheon Technopark, Incheon Smartcity			
Future plan			

- > Position the company as a provider of enterprise data-driven systems and artificial intelligence models for companies and industrial entities
- > Public launch and market entry for "Mondrian Data Platform" Al solution
- > Strengthen the capability as a technology innovator with support from external investment

	Name	Mondrian Al	Establishment	In 2016	C.E.O	Dae-eui Hong	
	Phone	+82 32-713-7984	E-mail	COI	ntact@mondr	ntact@mondrian.ai	
Main Business Field 1) Building an A Data processing 2) Developing an artificial intellige		infrastructure n industrial	3) Data analyvisualization 4) Data Utilization	ysis and zation Consulting			
	Main Product and Service		Al Playground, Catalog	Vision Factory	, Al Box Wo	rkstation, Data	
	Inves	tment history	0.1 billion wor	(Creativekorea	incheon ce	nter, '18 years)	

MONEYBRAIN

MoneyBrain

www.moneybrain.ai

Company Identity

MoneyBrain is a startup that provides deep learning technology and artificial intelligence services. It can handle natural language analysis, voice and video and provides interactive artificial intelligence services such as Al English conversation, Al news and Al virtual models.

□ Tech & Service Info

Core Al	■ Visual Intelligence	■ Sound Intelligence	■ Language Intelligence
	☐ Data Driven / Modeling	☐ Data Processing	☐ Hardware / Robotics
	☐ Reinforcement learning	☐ Autonomous driving	☐ AGI
	■ AEI	□XAI	☐ Etc
Framework	TensorFlow, PyTorch, Keras	Data type Voice (voice & secure Video (Spec	ce recording) cial person contract)

Company's Core Al Explain

- ✓ **Natural language processing**: Technology that analyzes and understands the user's questions or responses and thus communicates as human beings (ex).Chatbot)
- Speech synthesis: A technique that converts text into speech, reproducing a specific person's voice and intonation.
- ✓ Face synthesis: A technology that learns a certain person's image with Al technology and synthesizes not only the voice of speech, intonation, etc., but also the face, expression, and movement that speaks with the image.
- ✓ **Emotional expression**: A technique to express feelings of affirmation, negation, joy, sadness, etc. through a person's voice or facial expression.

Product and Service Overview

[B2B]

- ✓ **Chatbo**t: Providing corporate product recommendation, information guidance, and unmanned counseling services
- ✓ Speech synthesis: Reproduction of natural voice provides audio books and dialogue functions
- ✓ **Al Video Production Platform**: Providing a platform for Al video production, including news, broadcasting, and education

Product and Service Image



[B2C]

- ✓ Al News Service: Fastest News to Read by Al Announcer
- ✓ Al Training Service: Conversing Al characters in real time and studying English
- ✓ Al Entertainment Service: Conversation with my favorite Al star
- ✓ Al Shopping Service: Al Star introduces products to promote sales of shopping mall products





Business model	(B2B) Provides deep learning voice/imaging technology				
business model	(B2C) interactive artificial intelligence s	ervices			
	Deep Learning Technology Market Chatbot and Al platform: KRW 2.9 trillion	-Al Conversation in English: 100 trillion won worth of English			
Target market	Speech Recognition and SynthesisKRW 3.3 trillionVideo recognition and synthesis:KRW 2.9 trillion	education market worldwide -Al Broadcasting/Video: 590 trillion won worth of broadcasting/video markets worldwide			
Customers	(Chatbot) Finance, shopping, public, health care (Speech synthesis) infotainment, Al speaker, audio book, (Face synthesis) Broadcasting, education, commerce, en	character, call center			
Future plan					

[Deep Learning Technology]

- Speech synthesis: Shortening of composite time and developing voice modulation (change) technology
- Imaging Synthesis: Shortening of Synthetic Time and Developing Face Modulation (Change) Technology
- Emotional expression: Enhancement of voice and image-based emotional expression
- Other: Real-time image synthesis and streaming technology implementation

[Al service]

- Al English Conversation: An interactive English conversation service based on due diligence is to be launched.
- Al Training Service: Al Teaching Service to be launched in cooperation with a training company (ex.EBS)
- Al Broadcasting: Global news will be produced and delivered in real time in English and Chinese as well as in Korean.
- Al Commerce: A test will be conducted to promote the sale of shopping malls using Al stars.

Name	MoneyBrain	Establishment	In 2016	C.E.O	Seyoung Jang
Phone	+82 2-858-5683	E-mail	info@moneybrain.ai		
Main Business Field Develor intellig		Development of intelligence servi	deep learning techices	nnology, p	provision of artificial
Main Product and Service		Deep Learning \ Service, Al News	Video Synthetic Ser s Service	vice, Al E	inglish Conversation
Investment history		- KRW 500 milli - KRW 1.5 billio - KRW 1 billion	on (Donghoon Inve n (L&S Capital, 17 (CH& Partners, 19	estment, 1 years) years)	7 years)



MORAI Inc.

www.morai.ai

Company Identity

MORAI Inc. provides an autonomous vehicle (AV) simulation platform as an AV software development and testing tool. We strive towards aiding our clients in streamlining their software development process in order to achieve maximum reliability and performance.

☐ Tech & Service Info

Cove Al	■ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
	☐ Data Driven / Modeling		☐ Data Processing		■ Hardware / Robotics	
	Core Al ■ Reinforcement learning □ AEI		■ Autonomous driving		□ AGI	
			□XAI		■ Etc (Dataset Generation)	
Francourant.	Formula D.T. L. Data tons 0		Camera images, LiDAR data, Se		LiDAR data, Self-generated	
Framework	PyTorch	Data type 8	x secure	(within the simulation environment)		

Company's Core Al Explain

We create a simulation environment geared towards the testing and development of autonomous vehicle (AV) software and/or algorithms. Through the realistic modeling of sensor modules (cameras, LiDAR) and the surrounding environment (weather effects, roads, traffic signs), the simulation environment itself can be used to create datasets for AI training. The simulation also allows for testing decision-making and control algorithms by providing ground truth data of not only the road environment, but those of external actors such as surrounding vehicles and pedestrians.

Product and Service Overview

An Autonomous Vehicle (AV) Simulation Platform for AV Software Development and Testing. 1) Features

- Highly accurate virtual road environments built from high definition (HD) map data
- A wide variety of vehicle models and sensors models (sensors include cameras, LiDARs, GPS receivers)

2) Applications

- Create a virtual dataset which includes scenarios and conditions that are difficult to collect in the field
- Testing and verification of control and decision-making algorithms using ground truth data generated by the simulation environment
- Support integration testing of self-driving software and systems

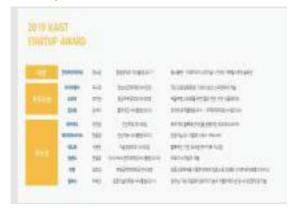






- Grand prize, 2019 KAIST Startup Award, Awarded by: KAIST
- 1st place, Environment perception category, Pangyo Autonomous Motor Show 2019, Awarded by: Gyeonggi Autonomous Driving Center
- Honorable mention, Startup investment category, Pangyo Autonomous Motor Show 2019, Awarded by: Gyeonggi Autonomous Driving Center





Business model	License	
	- Global Autonomous Vehicle Market / \$54B in 2019, projected to	
Target market	grow tenfold into a \$557B in 2026 Testing Products & Services	
	Market (Global / Transportation) / \$12B in 2018	
	National Research Institutes (incl. Advanced Institute of Convergence	
Customers	Technology, Korea Aerospace Research Institute) Universities (incl.	
	KAIST, CBNU, KMU, HYU, ···)	
Future plan		

Feature Improvement

- Support for additional types of datasets and information
- Support for reinforcement learning
- Additional road environments and test scenario implementation
- Implementation of advanced surrounding vehicle algorithms

Global Outreach

- Connect with global partners (HD-map providers, licensees)

Name	MORAI Inc.	Establishment	In 2014	C.E.O	Jiwon Jung, Jun Hong	
Phone	+82 70-5001-0508	E-mail contact@morai.ai				
Main Business Field		Autonomous Vehicle Software Development/Testing Tools				
Main Prod	duct and Service	MORAI Autonomous Vehicle Simulation Platform				
Investment history		-300 million won (Naver Corporation, '18)-100 million won (Hyundai Motor Company ZER01NE ACCELERATOR, '19)				



Mr.MIND Inc.

www.mrmind.ai

Company Identity

Mr.Mind is an artificial intelligence startup that is creating an older emotional dialogue doll based on natural language processing technology. Research algorithms in everyday conversations check your dementia diagnosis in advance and prevent solitude through 1 million emotional conversation data. It also detects negative words in everyday conversations and warns them to prevent various kinds of old newspapers in advance.

☐ Tech & Service Info

	☐ Visual Intelligence		☐ Sound Intelligence		■ Language Intelligence
Core Al	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics
	■ Reinforcement learning		☐ Autonomous driving		☐ AGI
	■ AEI		□XAI		☐ Etc
Framework		PYTORCH, TENSORFLOW, KER	RAS	Data type & secure	text, Data collection through the experience group/Outsourcing

Company's Core Al Explain

- Technology that allows questioners to identify and analyze hidden characteristics of a sample by conducting their intended experiments in a natural conversation.
- The technology of associating verbalness with domain knowledge to analyze hidden meanings and extend them to different sentence forms according to hidden meanings.

Product and Service Overview

- Alzheimer's diagnosis and prevention.
- prevention of solitude.
- Emotional dialogue to relieve depression and loneliness.
- The Establishment of an Effective Management System through the Management System.

Product and Service Image

-Based on artificial intelligence natural language processing technology

A companion Doll

- 2017.04 Ministry of SMEs and Startups(MMS), Korea Institute of Start-up and Entrepreneurship Development, Selection of start-up Research
- 2017.05 MMS, TIPA R&D, Selection of Government Research
- 2017.12 Ministry of Science and ICT, Selection of K-Global 300
- 2018.04 MMS, TIPS R&D, Selection of Government Research
- 2018.07 AI EXPO KOREA 2019, AI Competition Awards
- 2018.11 MIK, 2019 Conference & Networking season 2, 'MIK TOP 2 AWARDS'









Business model	HW Combination
Target market	 Target market:Local government, recuperation facility, Silver Town. Size:110 billion won budget for senior care services(2019), Increase every year.
Customers	 Geoje City Hall_a senior citizen's office Gwangju Donggu Office Jeju City Veterans Administration
	Futuro plan

Future plan

- Formation of Sustainable Sales Structure through B2G Channel.
- Target revenue of 70 billion within 5 years by expanding to B2C sector in 2020.

Name	MrMIND	Establishment	In 2017	C.E.O	DONGWON KIM
Phone	+82 10-9327-7179	E-mail	dwkim@mindma	pi.ai	
Main Business Field		Natural Langua	age Processing/S	mart Toy	y/Al platform
Main Product and Service		A companion doll 'Dol-Dol' :Prevention of Dementia and Old Care Bot Al capsule : Customizable capsule type Al speaker chatbot builder 'WIBO' : Anyone to make without expertise			
Investmen	t history	2017. 10 millio	ion won(infoban on won(ATSQUAF ion won(infoban	RE Inc.)	2019)



Mtifex Inc.

Preparing homepage

Company Identity

Mtifex designs new high-capacity battery materials through artificial intelligence and real experiments.

□ Tech & Service Info

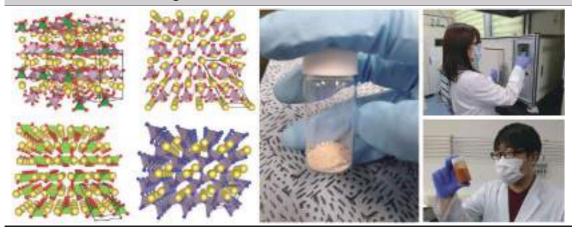
Cara Al	☐ Visual Intelligence		☐ Sound Intelligence		■ Language Intelligence
	■ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics
Core Al ■ R		Reinforcement learning		onomous driving	☐ AGI
	□ AEI		□XAI		☐ Etc
Framework		Tensorflow, Pytorch		Data type &	Our own materials
		Terisornow, Tytorci	<u>'</u>	secure	database

Company's Core Al Explain

Mtifex is specialized in battery experiments and A.I.-driven novel high-capacity battery materials design. (We build an intelligence that designs novel materials)

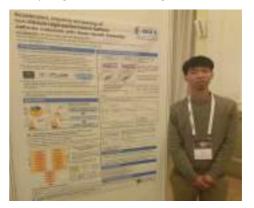
Product and Service Overview

- Develops machine learning (ML) prediction models for battery materials' properties (e.g., capacity, voltage, etc.)
- Designs novel high-capacity battery materials through ML and first-principles theoretical studies.
- Synthesizes identified novel materials and assembles battery coin-cells
- Licenses our patented battery materials to third parties.



- 2019.07.19. Named one of the finalists for the AI+X Startup Challenge 2019 [COEX, Seoul]
- 2019.09.16. Presented our research outcome on next generation battery materials using machine learning algorithm at the European Materials Research Society fall 2019 meeting [Warsaw, Poland]
- 2019.10.01. Picture of our startup group (left: laboratory; right: idea meeting)









Business model	Licensing source materials & AI technology to third parties
Target market	Cathode, anode, and solid-electrolyte materials for batteries
Customers	Battery manufacturers, Automobile industries

Future plan

- Advance the machine learning algorithm
- Build industrial networks (R&D Partnership)
- Build a patent portfolio

Name	Mtifex Inc.	Establishment	In 2019	C.E.O	Ahn, Eun Gong	
Phone +82 10-2931-1872		E-mail	eungong.ahn@mtifex.com			
Main Business Field		Novel battery materials design				
Main Product and Service		Cathode active materials; Anode active materials; Solid-state electrolytes for batteries			naterials;	
Investmen	t history	The South Kor	ean government	startup g	rant (2019)	



Mysterico, inc

MYSTERICO

https://mysterico.com

Company Identity

Mysteryco is creating artificial intelligence optimized for life solutions.

Chatbot builder (Latte AI) is based on natural language processing.

And we plan to diversify our business, including automation of work and food technology.

☐ Tech & Service Info

Core Al	☐ Vis	ual Intelligence	☐ Sound Intelligence		■ Language Intelligence
	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics
	☐ Rei	Reinforcement learning		nomous driving	☐ AGI
	■ AEI		□XAI		☐ Etc
Framework TensorFlo		TensorFlow, PyTo	rch	Data type & secure	Self build

Company's Core Al Explain

Natural language-based intention analysis, emotion analysis, paragraph summary, web crawl engine

Product and Service Overview

- -Latte AI (chatbot builder that anyone can easily create),
- -Latte Store (purchase and reservation of domestic service coupons for foreigners),
- -Latte VOC (Intelligence Analysis by Emotional Analysis of On / Offline Customers)





- 2018.12.20 Stage Nine Teheranro Encouragement Prize Winner
- 2019.04.03 17th PSWC of Venture Business Association
- 2019.05.27. Patent- interactive survey providing system and method using Al chatbot
- 2019.08.28. CNTTECH, inc Attracting investment
- 2019.09.12 Al chatbot builder launches Latte Al
- 2019.09.26 6th Start-up Nest by Korea Credit Guarantee Fund
- 2019.10.12. Venture company confirmation





Business model Online periodic payment					
Target market	Target market Domestic / Estimated Insufficiency				
Customers	Customers Domestic and foreign				
Future plan					

Expand and enhance services by extending from on- and off-line to the Internet of Things

Name	Mysterico, inc	Establishment	In 2018	C.E.O	Ko Namgil	
Phone	hone +82 1072553466 E-mail		liam@mysterico.co			
Main Business Field		Al				
Main Product and Service Natural			ge processing			
Investmen	t history	Investment attraction of CNT Tech				

Nearthlab, Inc

www.nearthlab.com

Company Identity

Nearthlab, under the vision of "Drone Driven Data," is developing autonomous drone solution that collects data required at industrial sites in a faster and more accurate way. Nearthlab is a compound word of Near, Earth and Laboratory. As satellites provided a new perspective from low earth orbit, Nearthlab strives to utilize drones to provide meaningful data from near earth, closer than satellites.

☐ Tech & Service Info

Core Al	■ Visual Intelligence			☐ Sound Intelligence	9	☐ Language Intelligence
	☐ Data Driven / Modeling			■ Data Processing		■ Hardware / Robotics
Core Ai	☐ Reinforcement learning		■ Autonomous driving		☐ AGI	
	□ AEI		□ XAI		☐ Etc	
Framework		Tensor RT	Dat	ta type & secure	lmage	e and Video files (Self)

Company's Core Al Explain

Nearthlab has capabilities in stable flight control in harsh conditions, autonomous flight based on artificial intelligence, and inspection data analysis through image processing and deep learning.

Product and Service Overview

Nearthlab's autonomous drones can reduce time for it takes to inspect one wind turbine to around fifteen minutes. They can be a very competitive alternative to manual inspection by humans.



- When the inspector presses the "Start" button, the drone takes off and safely maneuvers to the wind turbine.
- The drone recognizes the shape and position of the blades and calculates optimal path to conduct inspection.
- Using collision avoidance technology, the drone flies along the blade while maintaining a close distance of about a few meters.
- The drone collects location and laser data along with high resolution photo and uploads them to the Data Analysis Portal.
- When the inspection is complete, the drone returns to the base and safely lands.









Business model	1. Drone Inspection 2. Data Portal analysis					
Target market	\$3 Billion Drone inspection market, which is expected to grow to					
Target market	over 40 billion USD from 2019-2027					
Customers KEPCO (Korea) & Energy, Eurus Energy (Japan) & Energy						
Future plan						

In progress for global Expansion to other countries in APAC like Japan, Vietnam, Taiwan as well as Europe (Germany).

Name	Nearthlab, Inc	Establishment	In 2015	C.E.O	Jay Choi		
Phone +82 2-566-1574		E-mail	business@nearthlab.com				
Main Business Field		Wind Turbine Blade Inspection & Analysis					
Main Product and Service		Inspection 2.0					
Investmen	t history	About 3 million USD (Stonebridge Captial, Company K Partners, Devsisters Ventrues, '18)					



Neosapience, Inc.

https://typecast.ai/

Company Identity

Neosapience AI voice acting service "TypeCast" is a service that can express various emotions and personalities. We offer all services related to AI voice such as creating audiobooks to providing narration voice.

☐ Tech & Service Info

		☐ Visual Intelligence		Sound Intelligence		■ Language Intelligence	
Core Al	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics		
	☐ Rei	Reinforcement learning		onomous driving	□ AGI		
	■ AEI		□XAI		☐ Etc		
Framework		rk	Al Voice Synthesis model		Data type &	Voice data gathered by	
			(Internal developed)		secure	company	

Company's Core Al Explain

Able to control level of voice emotions and speaking style after modeling. Also, able to convert the same voice into different languages.

Product and Service Overview

Al voice acting service 'Typecast' allows users to download or share online audio content through copy/paste script data, choosing desired voice actor(s), and selecting the speaking emotion and speed. Users can



- 2019.03 Received grant from (KOCCA) for Emotional Audiobook project
- 2019.05 Presented at ICASSP 2019
- 2019.09 Presented at 2019 Interspeech research association
- 2019.10 Presented at Deview.









Business model	Saas, License				
Target market	Voiceacting market, audiobook, content media market, podcast				
Customone	Daekyo (Korea) & Publishing, Toothlife (Korea) & Donation platform,				
Customers	MBC (Korea) & Media, IT News (Korea) & Media, etc.				
Future plan					

Increase voice quality, expand emotion (speaking style), increase service usability

Name	Neosapience, Inc.	Establishment	In 2017	C.E.O	Taesu, Kim
Phone	+82 2-2155-4548	E-mail contact@neosapience.com			
Main Business Field Vo		Voice snythesis, digital voice cloning			
Main Prod	duct and Service	Al voice acting	service, 'Typecast	1	
Investment history		1.2Mil USD			



NerdFactory (Plani inc. Research & Development Center) nerdfactory.ai (http://www.plani.co.kr/)

Company Identity

NerdFactory provides AI recommendation, searching solution 'AIVORY' based on AI technologies represented by machine learning and reinforcement learning and leads new innovation in B2B(G) market.

☐ Tech & Service Info

	■ Visual Intellige	ence	☐ Sound Intelligence		■ Language Intelligence	
Core Al	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
Core Ai	■ Reinforcement learning		☐ Autonomous driving		□ AGI	
	☐ AEI		□ XAI		☐ Etc	
Cue ue e ue el		Data to		image (cra	wling), Natural Language	
Framework	tensorflow	Data type & secure (cr		(crawling)		
- ,						

Company's Core Al Explain

- 1) Natural language processing It is used to provide information and recommend contents through deep learning technology using natural language.

 Semantically similar natural language is recognized and used for recommendation
- system.
- 2) Image Abstract the image using the denoising deep learning technique. After abstracting an image, it is used to extract images with similar shapes or to identify the characteristics of the image.

Product and Service Overview

- AIVORY

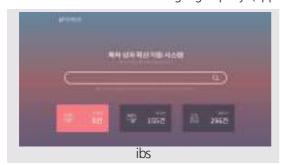
SW solution with search engine and Al-based contents recommendation engine







- 2017.11.23. Method and system for providing expert answers to natural language queries (registered patent)
- 2017.12.16. System for providing expert answers to natural language queries (registered patent)
- 2018.05.02. System and method for providing digital information (registered patent)
- 2019.09.16. System and method for providing document search and response through natural language query (application patent)









Business model	SaaS, License							
Target market	B2B2C (All fields include Enterprise and University), B2G2C							
Continue	Hanwha, KAERI, ibs, TIPA, Daejeon Business Agency, IITP,							
Customers	Innopolis foundation, Joongbu University, TechValue							
Future plan								

- Upgrade search and recommendation engine
- Upgrade delivery method (SaaS)

Name	NerdFactory (Plani inc. R&D center)	Establishment	In 2004	C.E.O	Lee Myungki	
Phone +82-42-934-3508		E-mail	plani@plani.co.kr			
Main Business Field		Al based Web/ App service development (R&D				
		center)				
Main Product and Service		AIVORY, WooryBaby (R&D center)				
Investment history		Nan				



NETON Co., Ltd.

www.neton.co.kr

Company Identity

NETON is a company aiming at realizing high-tech safety smart city by searching for people by using artificial intelligence face recognition solution and quickly and precisely identifying the identity of various incidents and accidents.

☐ Tech & Service Info

Core Al	■ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
	☐ Rei	☐ Reinforcement learning		onomous driving	□ AGI	
	☐ AEI		□ XAI		□ Etc	
Framework		Self-Integrated Al Framework		Data type &	Image, Self-collection	
		Framework		secure		

Company's Core Al Explain

Artificial intelligence face recognition is a technology that detects new objects by comparing the previous and current image frames, and quickly recognizes faces within images with small computations using a block-specific gradient pattern.

Product and Service Overview

Artificial intelligence face recognition solution is a next generation face recognition platform that is effective for searching specific objects by real-time surveillance based on deep learning.



- 2019.02.27 Certificate of Artificial Intelligence Technology, KORAIA
- 2019.07.19 Award of Excellence, 2019 AI+X Startup Competition
- 2019.10.20 Patent Registration (No. 10-2036490)
- 2019.10.23 Award Certificate, Gwangju Metropolitan City









Business model	Developing a smart embedded vision for hardware miniaturization using optimization technique for low-end operation of CPU and NDIVIA GPU engines.
Target market	The company aims to control and manage access, security and financial markets.
Customers	Jungheung Construction, SHINSEGAE I&C, Gwangju City, KEPCO, Wando-gun, and etc.

Future plan

Our company is looking to pioneer social safety net service, public service and security service platform.

Name	NETON Co., Ltd.	Establishment	In 2018 C.E.O Hong Chul, Myc			
Phone	+82 62-374-7890	E-mail	ceo@networkon.co.kr			
Main Business Field		Al Platform, Smart city, Semiconductor				
Main Product and Service		Artificial Intelligence Face Recognition Solution				
Investment history		N/A				

NEUROCLE

Neurocle Inc.

www.neuro-cle.com

Company Id	lentity
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Neurocle is a deep-learning vision software company for embedded systems.

☐ Tech & Service Info

Core Al	■ Visual Intelligence			☐ Sound Intelligence		☐ Language Intelligence	
	☐ Data Driven / Modeling			■ Data Processing		☐ Hardware / Robotics	
	☐ Reinforcement learning		☐ Autonomous driving		■ AGI		
	□ AEI		□ XAI		☐ Etc		
Framework Private Data		type & secure	Image	files(self) / Open Data			
Common /o Como Al Francia							

Company's Core Al Explain

People can find embedded systems everywhere such as in the car, home, and with other consumer electronics. As embedded systems either supplant human decision-making or offer capabilities beyond what a human could provide, embedded systems become very important for all industries.

The key highlight of our technology is to provide optimal parameters, to train massive amounts of data and to inference easily on embedded systems by deep learning methods. With this technology, neurocle provides deep learning vision software on the device in all demanding areas of imaging like the real-life application, security, defense industry, medical industry, manufacturing, etc.

Product and Service Overview

- Product: Neuro-T (Deep Learning Vision Software on Device)
- Functions
 - Classification Classify image types
 - Segmentation Detect areas of objects
 - Object Detection Detect the number of objects' and location
- Features
 - Optimized Workflow for Deep Learning Projects
 - Server-Client architecture
 - Auto Deep Learning for Best Modeling
 - Flexible Platform including Embedded Systems

Product and Service Image









[Classification]

[Segmentation

[Object Detection]

■ Business Info

Service Reference – Private / Award performance – N/A

Business model	Software license			
Target market	Target market – Asia / Europe / America			
rarget market	Size - \$100 billion			
Customers	Private			
F. C. C.				

Future plan

- Release Deep learning Vision Software "Neuro-T"
- Discover global partners to expand networks
- Provide solutions to customers in many industry and business sectors

Name	Neurocle Inc.	Establishment	In 2019	C.E.O	Hongsuk Lee	
Phone	+82-2-6952-6898	E-mail	neurocle@ne	urocle@neuro-cle.com		
Main Business Field		Security / Defense Imaging / Medical / Manufacturing / Logistics / Agriculture / Education / Social Media				
Main Product and Service		Neuro-T / Neuro-RT – Deep Learning Vision Software on Device				
Investme	nt history	N/A				



Neurocoms Inc.

www.neurocoms.com

Company	Identity
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Neurocoms Inc. is a company that has hardware technology computing artificial intelligence services at a high speed in small devices, which was possible only through large systems or cloud servers.

☐ Tech & Service Info

Coro Al	☐ Vis	ual Intelligence	☐ Soui	nd Intelligence	☐ Language Intelligence	
	☐ Data Driven / Modeling		☐ Data Processing		■ Hardware / Robotics	
Core Al	☐ Reinforcement learning		☐ Auto	nomous driving	□ AGI	
	□ AEI		□XAI		☐ Etc	
Framework		Self		Data type & secure	Self	
				223410		

Company's Core Al Explain

Deep Runner is a general-purpose IoT visual sensor module that recognizes objects it learned from videos. It is difficult to use GPU for IoT technology as it consumes hundreds of watt of electricity to process deep learning. However, 'Neuron Machine,' our original neural network hardware technology, processes deep Learning algorithms that shows high recognition rate only with few watt, making it applicable for various IoT technologies.

Product and Service Overview

Major features

- 1. Recognizes objects in video stream using deep learning algorithms
- 2. Easily implement complex AI services with simple JavaScript
- 3. Provides Deep Trainer deep learning training software

Product and Service Image



Product characteristics

- 1. Supports detection/location algorithms as well as classification algorithms
- 2. Supports state-of-the-art deep learning algorithms
- 3. High speed and low power consumption
- 4. Easy-to-use deep learning training software

- Prime Minister Award in 2018 Korea Invention Patent Competition
- Patent No. 10-1803409 Multi-layer neural network computing device and method
- Patent 10-1788829 Convolutional Neural Network Computing Device
- 2019 Venture company certificate issued









Business model	HW Combined Dementia Units / Blockchain-based Healthcare
business model	Information Sharing Platform Services
Target market	Early Diagnosis Market for Dementia / Entering the Medical Data
rarget market	Exchange
Customers	National Selling and Security Center / Global Medical Data
Customers	Exchange

Future plan

As a medical data company, we will lead the world market as a medical artificial intelligence technology company by applying artificial intelligence technology to the medical industry.

Name	Neurocoms Inc.	Establishment	In 2015	C.E.O	Byungik Ahn	
Phone	+82 2 424 0126	E-mail amy@neurocoms.com				
Main Busi	iness Field	CCTV unmanned surveillance system, factory automation				
Main Prod	duct and Service	Deep Runner, a intelligence deep	a small, low-po o learning objec	ower devi t recognit	ce for artificial	
Investmen	t history	N/A				



NEUROPHET, Inc.

www.neurophet.com

Company	Identity
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NEUROPHET, Inc. develops the cutting-edge software for neurological diagnosis, treatment guide, neuroscience research using Al driven brain segmentation (measurement of brain structure) and brain modeling technologies.

Tech & Service Info

Core Al	■ Visual Intelligence		☐ Sound Intelligence			☐ Language Intelligence	
	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics		
Core Ai	☐ Reinforcement learning ☐ Autonomous dri	Autonomous driving	☐ AGI				
	☐ AEI		\Box >	(AI		Etc	
Framework Go		Google TensorFlow	,	Data type & secure		DICOM image	
						<u> </u>	

Company's Core Al Explain

Al-powered NEUROPHET SegEngine : Al driven brain segmentation technology

- > Provides precise structural information for neuro image analysis, neurological diagnosis and surgical planning
- ▷ Segments automatically brain MR images into 107 regions within 1 minute regardless of race, manufacture, and scanning parameters of scanner

Product and Service Overview

1. NEUROPHET tES LAB 2: The simulation software for the effect analysis of tDCS/tACS

- >Fully automated brain segmentation using brain MR image
- ⊳ Personalized 3D model generation
- Simple & easy electrode customizing
- ⊳ Rapid & effective individual stimulation effect analysis within 10 minutes

2. NEUROPEHT AQUA - The neurodegeneration analysis and diagnostic supporting software

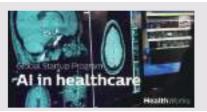
- Delta A computer-aided diagnosis system to assist clinical diagnosis for AD(Alzheimer's Disease) and MCI(Mild Cognitive Impairment) based on quantitative analysis of neurodegeneration and volumetric brain information
- ▶ Identifies minor structural brain changes and degrees of cerebral atrophy in certain regions based on neurophysiological testing battery and brain MR images
- \triangleright Maximizes the accuracy and efficiency of clinical diagnosis by minimizing read-out time and providing accurate abnormal findings



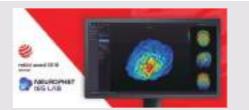












Business model	Software license sales, HW Combination, License		
Dusiness inouei			
	- Global MRI market size is 48 trillion KRW market annually (Neurological		
	Field, No.1 with 25%), Asia-Pacific is the largest with 46.15%		
	- Whole-brain imaging field of Neuroscience market size is 44 trillion KRW		
Target market	annually		
	-The Number of domestic patients by brain disease and annual medical		
	expenses: Stroke(570,000/₩1.5 trillion), Mental illness(640,000/₩2,580 billion),		
	Dementia(420,000/₩1.5 trillion)		
Customers	Samsung Medical Center(Korea), University of North Carolina(USA), Brainbox		
Customers	Ltd.(UK)		

Future plan

- Description Adds new portfolios of neuromodulation (electrical brain stimulation treatment) products
- \triangleright Expands sales distributorship of NEUROPHET tES LAB and increases overseas sales (Europe, USA \rightarrow China, India, South America)
- \triangleright Neurological diagnosis assistance software : Domestic market release in 2020 and FDA approval in 2021
- Diversifies sales through brain segmentation and modeling engine licensing

Name	NEUROPHET, Inc.	Establishment	In 2016	C.E.O	Junkil Been	
Phone	+82 2-6954-7971	E-mail	contact@neuro	phet.com	1	
Main Busi	ness Field	Al Platform, Neurological diagnosis, Brain MR image analysis and Neuromodulation				
Main Prod	duct and Service	Brain segmentat MR images	ion and model	ling engi	ine using Brain	
Investmen	t history	1.5milion KRW Holdings, '18) 100 million KRW	(Daeduck Vent / (Futureplay, '18	ture Par 3)	tners & Mirae	

ragingbull (newplus)

newplusfilm.com

☐ Company Identity

[A company that curates artificial intelligence, technology, and the future]

□ Tech & Service Info

Como Al	Vis	ual Intelligence	☐ Sound Intelligence	■ Language Intelligence
	☐ Dat	a Driven / Modeling	☐ Data Processing	☐ Hardware / Robotics
Core Al	☐ Reinforcement learning	☐ Autonomous driving	□ AGI	
	☐ AEI		□XAI	■ Etc
Framework		self	Data type & secure	Text, Image files

Company's Core Al Explain

We have expanded to cognitive search and new technology scenarios based on the processing of Artificial Intelligence to create the world's most unique artificial intelligence content by applying global experts and IT technologies to the original drama series "Artificial Intelligence" in 2015.

Al such as "image recognition, extraction of key phrases of text and emotional analysis of text writing emotions" through deep integration of cognitive abilities, for example with respect to artificial intelligence materials. You can satisfy SW technology with content, enable a new experience for exploring big data, and release it as an OTT-included global platform in the future, which will drive all audiences and viewers crazy.

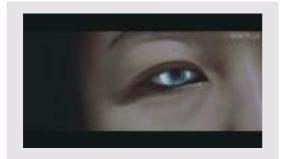
Product and Service Overview

"Ai, her" is Korea's first and only content that curates artificial intelligence, technology and the future. The dividing line between theater films, OTT original films and Web dramas and TV dramas has already been removed. As the platforms increase and the competition intensifies, the original, unique content will become more popular. We have to face the terrible human desire with artificial intelligence, Al-powered human beings, and the present and future that we face.

Product and Service Image



"Ai, her" depicts a world in which the human brain and the computer are transmitted. It's going to give us a new and powerful story that we've never seen before, a human desire that unfolds in that forbidden world, that we can look back on now and in the future in response to technology.









Business model	Netflix Black Mirror Series / Korea's First						
Target market	Domestic, US, Europe, Southeast Asia / World market						
raiget market	6,000,000 trillion won / Domestic market 400 billion won						
Customers	Ai, Tech, and Near-Future enthusiasts/ consumers who need						
Customers	artificial intelligence and new technology curations						

Future plan

Unique content companies related to artificial intelligence materials (Korea's first full-length film based on artificial intelligence,

"Artificial Intelligence, Her" (in the making of the original drama)

The speed at which small and medium-sized enterprises move at a fast pace, slow pace, and high speed

Clear discriminations with typical large companies

Future technology curation where the anxiety and hope of artificial intelligence intersect

Name	e Raging bull	Establishment	In 2015	C.E.O	Jungsub Lee
Phone +82 2-6408-8881		E-mail	newplustommy@gmail.com		
Main Business Field Original dram			/ Al contents		
Main Product and Service Al, her					
Investr	nent history	self-investment			
Investr	nent history	self-investment			



Ninefs

www.ninefs.com

Company Identity

Company developing machine learning tools for convergence of ICT technology and Al

Tech & Service Info

	■ Vis	ual Intelligence	☐ Sound Intelligence		■ Language Intelligence	
Core Al	■ Data Driven / Modeling		☐ Data Processing		■ Hardware / Robotics	
Core Ai	■ Reinforcement learning		☐ Autonomous driving		☐ AGI	
	☐ AEI		□ XAI		■ Etc (Tool development)	
		ddoyiAl (TensorFlow, Ker	as)	Data type & secure	Numerical, image, language, self-secured	

Company's Core Al Explain

(Core) Machine learning technology education, consulting, and prototype tool development for ICT technology convergence and artificial intelligence

(Technology) numbers, strings, images, media, etc. (data) + prediction, monoclass, multiclass, compression / conversion, etc. (algorithm)

(operation) ICT Technology Convergence Management (ddoyi) + Data → Learning → Model → Test Management Process (ddoyiAl)

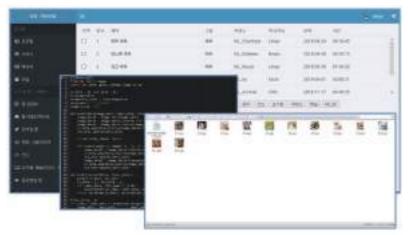
Product and Service Overview

(ddoyi) Tools & Builders Platform for ICT Technology Fusion (Online and Offline Versions)

- o ddoyiCode, ddoyiWeb, ddoyiLayout, ddoyiCollect, ddoyiApp, ddoyiNetwork
- o ddoyiAR, ddoyiVR, ddoyiAI, ddoyiBlock, ddoyiQuantum (total 11 ICT fields)

(ddoyiAI) Machine Learning Tools and Builder Services for Artificial Intelligence (included in the ddoyi platform)

Product and Service Image



< Machine learning tools and builder services for AI in the ddoyi platform ddoyiAI >









Business model	Development and application of machine learning tools			
Target market	In particular, as the issue of machine learning development for Al technology expands, market demand for related development tools and builder platforms is expected to increase.			
Customers	EduTech: General High School, Startups, SMEs, etc. SmartFactory: Doosan (Engine, Boiler Shop), Hyundai (Ship, Car)			
Future plan				

Future plan

- O Stick-to-hardware (commercialization) of the current ddoyi (ICT + AI) platform service : 90% in progress
- o ddoyi platform service (advanced) with AI + RPA technology : 30% in progress
- o ddoyi platform services in the form of SoC (System on Chip) (semiconductor chipping): 10% in progress
- O Maximize operation of quantum and photon technology with ddoyi platform service (under research): 3% in progress

Name	Ninefs	Establishment	In 2013	C.E.O	SeHyun, Kim	
Phone	+82 01-5140-7961	E-mail	ninefs@naver.com			
Main Business Field		Development and application of machine learning tools				
Main Product and Service ddoyi						
Investment History		Self-capital				



ninewatt co., Inc

Company Identity

For 'universal energy savings', it offers a normal but universal way to find and reduce wasted energy from traditional energy saving methods through cost investments. Through the fusion of data and innovative technologies, we provide a service that helps you find and save energy and money that is wasted, rather than energy-saving, traditional investments.

□ Tech & Service Info

	■ Vis	■ Visual Intelligence		nd Intelligence	☐ Language Intelligence	
Cono Al	■ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics	
Core Al		nforcement learning	☐ Autonomous driving		☐ AGI	
	□ AEI	□ AEI			□ Etc	
		salf dayalannaant		Data time %	text, Energy	
Framewo	rk	self-development framework		Data type &	Consumption Patterns	
				secure	(self & open api)	

Company's Core Al Explain

Analysis, Prediction, and Visualization of Energy Consumption Patterns A Study on the Estimation and Optimization of Energy Consumption Based on Building Information. Providing Energy Saving Effects compared to Energy System and Investment Costs that can be installed in a Building.

Product and Service Overview

Unlike traditional energy-saving methods, we offer a common solution with a wide range of applications through cost investments. By utilizing data and innovative technology, we not only save energy but also reduce unnecessary expenses.











Business model	Energy saving cost share (HW+SW combination, maintenance)
Target market	Building energy saving market, DR market, renewable energy link market, ESCO market, etc.
Customers	Customers of energy saving service for buildings (housing, building)

Future plan

While numerous technologies are being applied to buildings at a rapid pace, the lack of experts to understand and utilize the system is aimed at leading companies in the market that are unable to effectively utilize expensive energy systems and thus create new markets

Name	ninewatt co., Inc	Establishment	In 2019	C.E.O	KIM Youngrok	
Phone	+82 70-8866-7226	E-mail	ninewatt@ninewatt.com			
Main Business Field		Energy Saving, Energy efficiency improvement				
Main Product and Service		Energy Saving Controller	g Solution,	Energy l	Edge Computing	
Investment history		N/A				



Nomad Connection, Inc.

www.nomadconnection.com

	Company	Identity
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Nomad Connection is a company providing software and business solutions since 2005 to drive digital transformation using advanced analytics platforms and blockchain technologies.

☐ Tech & Service Info

Ī		☐ Vis	ual Intelligence	☐ Sou	nd Intelligence	☐ Language Intelligence	
Core Al	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics		
	Core Ai	Reinforcement learning		☐ Autonomous driving		■AGI	
	□ AEI		□XAI		☐ Etc		
	Framework		MLflow, Tensorflow	Ι,	Data type &	Finance, Image, Public	
	riailiewo	IK	Pytorch, Tesserect	secure		& Private Project Data	

Company's Core Al Explain

DAVinCI PLATFORM is able to offer industrial best practice in Artificial Intelligence technology with AI applications, Data Analytics and advanced AI platform. Features designed to easily scale and employ the available resources in DAVinCI PLATFORM for users to analyze collections of data and develop predictive and prescriptive models. Embedding these models within automated business process applications can improve business productivity and value.

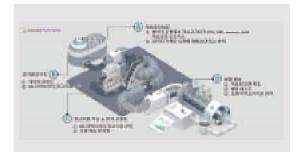
Product and Service Overview

- Artificial intelligence architecture which embraces volatility of technology trends can be developed and Machine Learning life cycle is operated itself on private cloud in order to provide various AI services in best practices.
- DAVinCI PLATFORM automates complex processes of developing ML algorithms so that it is significant improvement in achieving competitiveness and reduction of costs in multiple sectors where there is a need of data analysis.



- Red Herring Asia Top 100 Awards
- K-TECH in Silicon Valley 2014 IR 4th (US)
- Startup TOP 100 Awards(2013~2015)









Business model	PaaS,Customization SI,Tech Support		
	Expansion of fintech industry using technology such as data		
Target market analysis, AI, blockchain through / Develop financial services			
	partnerships with banks		
Customers	Shinhan Bank, KB indemnity insurance, Korea Association of Property		
Customers	Appraisers, etc		

Future plan

- Expanding financial market power using our technology
- Promotion and commercialization of Nomad Connection technology
- Identify the detailed status of the international financial market

Name	Nomad Connection, Inc.	Establishment	In 2005	C.E.O	Jonghwan Jeon
Phone	+82 2-2608-1575	E-mail	hi@nomadconnection.com		ction.com
Main Business Field SW		SW develop &	provision		
Main Product and Service		Al Solution: DAVinCi Platform Blockchain Solution: N-Biz Chain Solution			
Investmen	nt history	N/A			



NOTA Incorporated

www.nota.ai

Comp	any I	dentity
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NOTA Incorporated is a promising startup that focuses on edge-device AI solution which doesn't need any server or cloud for Al systems. Nota's deep learning model compression technology allows models to be stored individually on small edge devices without affecting the performance. We at Nota dream of a world where everyone can benefit from Al in their pockets.

	Tech	&	Ser	vice	Info
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Core Al	■ Vis	ual Intelligence	☐ Sound Intelligence		☐ Language Intelligence	
	■ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
	□ Rei	nforcement learning	■ Autonomous driving		☐ AGI	
	■ AEI		☐ XAI		☐ Etc	
Framewo	rk	TensorFlow, Keras	etc.	Data type & secure	Provided by client/ Self	

Company's Core Al Explain

Deep learning models are revolutionizing computer vision and natural language processing, but they come at the cost of large storage and communication costs. Nota's deep learning model compression technology allows models to be stored individually on small devices, not on a server or cloud, and thus does not require any internet connection. So compared to large AI models, our on-device AI technology incurs only 20% of the previous cost, and speeds up inference and predictions by 70%. Our compression removes latency, server/network cost, and privacy problems, while still achieving state-of-the-art performance at real-time object detection, identification and tracking.

Product and Service Overview

On-device Al solution

- -Alsolutionwhichdoesn'tneedanyserverorcloudforAlsystems
- -removeslatency, server/networkcost, privacyproblems
- -incurs20% of the previous cost, speeds up inference and predictions by 70%

Product and Service Image



Apparatus and method for interfacing keystrokes(PCT/KR2015/0763) Method for display device and its touch input processing(PCT/KR2015/010610)
Method And Device For Processing Touch Input(KR10-2018-0007945)
Method and system for downsizing neural network(KR10-2017-0053681)

Method and system for personalization of neural network(KR10-2017-0053722)

Effective Network Compression using imulation-guided Iterative

Pruning(PCT/KR2018/015831)

Effective Network Compression using Simulation-guided Iterative Pruning[submitted to NIPS2018W.onMLPCD2] End-to-end multi modal emotion and gender recognition with dynamic joint loss weights [selected as a spotlight talk,IROS 2018 W.on Cross modal Learning for Intelligent Robotics] Robust Deep Identification and Gender Classification using Multimodal Biometrics [submitted to KDD 2019 W.onML for Healthcare]

- 2015. KAISTE5 Program(start-up incubating program)selected technology.

- 2015. K-Global Startup Finallist.

2015. Seed Investment from NAVER D2 Startup Factory
 2016. Bridge Investment from NAVER D2SF&Bluepoint Partners(VC).

- 2018. Research presentation in IROS2018 workshop on CLIR

- 2018. Submission research paper to NIPS 2018 On-device ML workshop - 2019. Attended the MWC-4YFN in Barcelona, Spain

Business model	Al Model License		
Target market	Size of the target market for NOTA: 1) Total Addressable Market: \$10 billion(Al Assistant) 2) Served Available Market: \$2 billion(Vision Al) 3) Serviceable & Obtainable Market: \$1 billion(Object Detection) According to Tactica's forecast, Al edge device shipments will increase from 161.4 million units in 2018 to 2.6 billion units worldwide annually by 2025.		
Customers	Petslab(Korea) & Online service ATAM(Korea)&Dataservice Funda(Korea)&P2PFintech Fimasia(Korea)&Onlinecommerce Bitsensing(Korea)&ITS thewavetalk(Korea)&Bio		
Futuro plan			

Future plan

Development On-device AI product and Commercialization.

- Development On-device AI solution based on each industry:Vision AI Products

- Development On-device AI for each industry:Retail,Smart Factory, ITS, IoT

- Development On-device Al product Integrated with HW & SW

Name	NOTA Incorporated	Establishment	In 2015	C.E.O	Myungsu Chae	
Phone	+82 10 5059 6657	E-mail	mschae89@	@nota.ai		
Main Busi	ness Field	Development On-device AI and Providing Solution based on On-device AI - Development On-device AI solution for Vision - Development On-device AI solution for Data				
Main Prod	duct and Service	1) On-device Al Solution for Vision - On-device object recognition - On-device Identification - Object Tracking 2) On-device Al Solution for Data - Asset evaluation Al Model & solution				
Investmen	t history	2015/2016 Seed - Naver D2 SF 2019 Pre-A Inves - Stonebridge \	& Bluepoin stment		rs	



Noul Co., Ltd.

www.noul.kr

□ Company	Identity
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From sample slide-prep to imaging review and Al diagnosis, miLab $^{\text{TM}}$ combines gold standard morphology-based diagnosis workflow into a fully automated and scalable point-of-care diagnostic platform. Embedded with Al analytics and Noul's patented liquid-free smart consumable cartridge, miLab $^{\text{TM}}$ is able to provide an accurate clinical diagnosis in 15 minutes using just one drop of finger pricked blood.

	Tech	RT.	Service	Info
$\overline{}$	Lech	CV	DEL VICE	-11110

Cara Al	■ Visual Intelligence			☐ Sound Intelligence		☐ Language Intelligence
	☐ Data Driven / Modeling			■ Data Processing		■ Hardware / Robotics
Core Al		Reinforcement learning		☐ Autonomous driving		☐ AGI
	□ AEI		☐ XAI		■ Etc	
F	Data Data		Data type: microscopic blood cell images		pic blood cell images	
Framewo	rĸ	PyTorch	& secure		Collection: ~1.5B blood cells, 3,228 samples.	

Company's Core Al Explain

Al-driven diagnostics onboard Noul's miLab™ diagnostics platform relies on deep learning, a subset of artificial intelligence, based on neural networks. Since the algorithm is implemented on a point-of-care diagnostics device with relatively limited computational resources, two primary criteria are considered during the development:

- fast processing time to maintain large patients throughput
- efficient computations to reduce device cost and optimize required computational resources

Product and Service Overview

Noul's miLab™(Micro-Intelligent Laboratory), is a fully automated, Al-driven morphology-based blood cell diagnostics platform incorporating liquid-free and washing-free test cartridges which can substitute all functions of a clinical laboratory.

Product and Service Image



[miLab™ Malaria] is a fully automated POC (point-of-care) blood testing platform that diagnosis Malaria, a disease that impacts more than two billion people every year.



[miLab™ Blood Cell Morphology Analyzer] is the first morphology-based POC (point-of-care) hematology analyzer. Only large hospitals currently have the resources to support the lab space, skilled technicians, and large centralized medical devices to perfrom such tests.









Business model	Noul's business model consists of three phases. First, we will market our diagnostics platform then second, we will sell the corresponding smart consumable test cartridge for the platform which will create regular and continuous revenue. Lastly, once we have massed enough data from the platform installs, we will also market that data.				
Target	Global clinical laboratory market (\$100 billion dollars by 2022)				
market	Global Chilical laboratory market (\$100 billion dollars by 2022)				
Customers	Asan Hospital, Severance Hospital, Massachusetts General Hospital, Columbia University, Swiss TPH, MIT, Harvard University, WHO, FIND, Bill & Melina Gates Foundations, Korea Center for Disease Control, US Department of Defense, Cambodia Ministry of Health				

Future plan

By 2020, RUO (Research-Use Only) testing platform will be released along with cartridges for malaria and blood cell morphology analyzer, after the completion of FDA and WHO PQ certification, overseas sales will be expanded and will become sustainable. Investments into the development of additional application areas will continue and by 2023, our solution will be scaled to include microbiology and blood cancer among other application areas.

Name	Noul Co., Ltd.	Establishment	In 2015	C.E.O	Chan Yang Lim / Dong Young Lee Ph.D.	
Phone	Phone +82 31 308 6310 E-mail		marketing@noul.kr			
Main Business Field		Al driven diagnostics platform				
Main Product and Service		miLab™ (Micro-Intelligent Laboratory)				
Investme	ent history	USD \$15 Millior	1			

ODDCONCEPIE

Odd Concepts Inc

oddconcepts.kr

Company Identity

We are currently focused in applying Visual Cognitive Commerce Technology into marketing and distribution of the fashion domain. Distributed/parallel computing engine and more than a dozen neural network models and algorithms are engineered in-house; in addition, PXL services are available domestically and abroad to convert existing image data into the content needed by users through analysis, search and recommend logic in our own system.

□ Tech & Service Info

Comp. Al	■ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence
	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics
Core Al	☐ Reinf	inforcement learning		Autonomous driving	☐ AGI
	☐ AEI			XAI	☐ Etc
Framework		Self Development		Data type & secure	fashion images / self

Company's Core Al Explain

Fashion meets Artificial Intelligence: the technology in analyzing, extracting and searching for fashion product images based on user's personal interest

Product and Service Overview

PXL offers the A.I. technology that provides fashion products based on user's personal interest: 1) recommends similar products by finding related image algorithms, 2) extracts attributes from each image, and 3) provides corresponding styling products through CODI service.







Business model	SaaS		
	1. In 2019, the size of the global A.I. market is about 5.4 trillion		
Target market	Korean won (4.6 billion US dollar) and is expected to grow up to		
	101 trillion won (86 billion dollar) by the year of 2025. 2. It is also		
	expected for the Fashion sector to increase from 292 billion won		
	(250 million dollar) to 5.84 trillion won (5 billion dollar).		
Customers	Lotte Shopping, Hyundai department store, zigzag, sta1.com,		
Customers	Magaseek, dfashion		
Future plan			

Promote market competitiveness based on credentials secured through PXL Fashion Launch new business models based on recently developed strategies Active sales through overseas resellers

Name	Odd Concepts Inc	Establishment	In 2012	C.E.O	Jeongtae Kim	
Phone +82 2-556-7650		E-mail	hello@oddconcepts.kr			
Main Business Field		Fashion E-commerce				
Main Product and Service		PXL				
Investment history		2.5 billion won (Stonebridge Capital, Colopl Next)				



Oezsoft Inc.

www.oezsoft.com

Company Identity

Based on machine learning-based face recognition, encryption, and middleware technology, we are a technology company that has developed face recognition access control system, city safety control solution, non-face-to-face account opening and smart banking system of financial institutions.

☐ Tech & Service Info

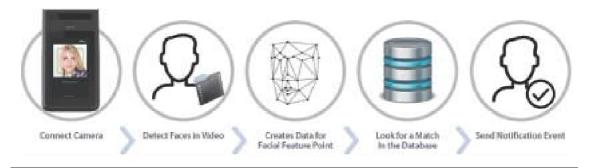
Core Al	■ Vi	sual Intelligence	☐ Soui	nd Intelligence	☐ Language Intelligence
	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics
	Reinforcement learning		☐ Autonomous driving		□ AGI
	☐ AEI		□ XAI		☐ Etc
Framework		mxnet, tensorflow,		Data type &	video, image (Self -
riailiewo	IK	Self-developed frame	work secure		collecting, Internet Cloning)

Company's Core Al Explain

Face recognition authentication function through camera image analysis improves face recognition rate and reduces recognition rate caused by makeup, jewelry, glasses, etc. through data collection and continuous Al machine learning technology. It also blocks forgery of photos, masks, and silicone counterfeit masks.

Product and Service Overview

- 1. Connect Camera
- 2. Detect faces in video
- 3. Creates Data for Facial Feature Points
- 4. Look for a match in the Database
- 5. Send notification event



- 2017.09.30 CJ Korea Express Logistics Center Face Recognition Time and Attendance System
- 2017.00.00 KT face recognition drone and PyeongChang People Counting System (solution delivery)
- 2018.12.31. BLD face recognition access security terminal
- 2019.04.30. LG U + Face Recognition Provides Gender / Age Analysis Solution (solution delivery)











Business model	Development of face recognition solution license, Face recognition
	based authentication service
Townst woodest	Fin Tech security certification solution, access control security
	solution for large-scale business, solution for hierarchical analysis
Target market	such as customer's age and gender for marketing use
	/ About 20 billion
Customers	LG U +, KT, Korea National Savings Bank, Hanwha General
	Insurance, CJ Logistics

Future plan

We are developing a face recognition payment service model using a face recognition solution with distributors for the purpose of 2020 service. Through deep learning technology, we are planning to provide better recognition rate by studying the improvement of recognition rate according to the change of service environment and researching the traceability model according to age change.

Name	Oezsoft Inc.	Establishment	In 2004	C.E.O	Seounghoon Jee	
Phone +82 2-720-0032		E-mail	shjee@oezsoft.com			
Main Business Field		Solution Development (Face Recognition, IT) / Fin Tech				
Main Product and Service		Face recognition authentication solution, EZWay4.0 middleware, Encryption solution				
Investment history		1.2 billion won (Surya Korin International Inc, 19 years) - Face recognition authentication payment system				

OMNIOUS OMNIOUS

www.omnious.com

Company	Identity
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Below is a description about the identity of OMNIOUS as an Al company. Visual Recognition Al company OMNIOUS was established in 2015 by co-founders studying deep-learning technology in KAIST. OMNIOUS would like to accelerate a Digitalization of fashion/commerce industry and provide you with fashion images after processing those images as a series of meaningful data. We are working with experts in both Al and fashion fields, so that we could graft Al onto fashion thus offering more comfortable and more personalized fashion commerce experience. Currently we are supplying Omnious Tagger, which is capable of providing 13-over attribute information using our own technology, to many home and foreign major fashion brands/commerce companies, and now, the latter half of the year 2019, we are on the threshold of launching 'fashion trend analysis service' based on data collected from fashion influencers on SNS.

☐ Tech & Service Info

Core Al	■ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence		
	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics		
	☐ Reinforcement learning		☐ Autonomous driving		□ AGI		
	☐ AEI		□XAI		☐ Etc		
Framework		Pytorch	Data type & secure	fashion image by classifying those images with category			
Company's Core Al Explain							

Fashion Image recognition AI of OMNIOUS is capable of textualizing (with consistent criteria) even detailed attributes, from which you can get a hint of micro-trend, such as textile, print, design detail, looks as well as general attributes such as colors by recognizing the fashion product within the image.

And it can also recommend similar products("you may also like") with our especially developed search engine for fashion field.

Product and Service Overview

OMNIOUS Tagger recognize the product within the image and classify quickly and accurately its various attribute information ranging from category, color, length, texture, to looks according to consistent criteria. These refined tag data could be adapted to product search keyword and filter optimization thus enhancing a purchase conversion rate and could be utilized as a sound ground for a variety of decision making situations. To set aside the Tagger, we are also planning to release OMNIOUS Trend service, a Customer/Market Intel Tool that can service AI image based search-recommendation and understand consumer trends real-time, within this year.

Product and Service Image

See Bisiness Info

- 2017. 8 Elected as tech leading Startup by TIPS
- 2018. 5 OMNIOUS TAGGER commercialization (the nation's first Fashion Tagging Solution)
- 2019. 9 TAGGER SaaS Beta version release
- 2019. 11 OMNIOUS TRENDS Beta version release (scheduled)









Business model	 OMNIOUS TAGGER API : Subscription-based charge system according to amount of usage OMNIOUS LENZ : Measured rate charge system according to amount of Call usage SaaS and Trends Service : Subscription-based charge system according to usage
Target market	Fashion market size worldwide is estimated to approximately 3 trillion USD scale. / As our company 0.3 trillion USD to 0.35 trillion USD considering.
Customers	We have various types of clients; Top(in sales) national(Korean) fashion manufacturers/brands, Major fashion commerce companies and start-ups, and the nation's largest platform linking fashion wholesalers and retailers, SI companies et al.
	Future relation

Future plan

- Dominate the national market in advance via disseminating OMNIOUS Tagger quickly nationwide.
- Serve trend information collected from fashion influencer as a form of subscription-based SaaS for major fashion brand and commerce companies to refer to when manufacturing and sourcing products. Distribute this information to East-Southeast Asia fashion commerce
- companies, companies sensitively reflecting Korean trends, as well.

 Offer technology and contents including image search/recognition and trend services through collaborating with domestic electronics and mobile manufacturers.

 Play a pivotal role necessary in fashion industry by constantly developing optimized solution for fashion marketing and by developing trend service including sales information and massive fashion commerce/brand images analysis.

Name	Omnious	Establishment	In 2015	C.E.O	Jaeyoung Jun
Phone	+82 2-543-7762	E-mail	biz@omnious.com		
Main Business Field		(Fashion B2B Service			
Main Product and Service		OMNIOUS Tagger, Fashion Image Recognition AI Service			
Investment history As of 2019.11 accumulated f			resent) Series A fu ding amount of 6	nding ; 3 billion KF	billion KRW, RW so far



Paranenergy Inc.

www.paranenergy.com

Company	/ Identity
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ParanEnergy specializes in energy management and solutions that analyze your customers' energy data and provide cost-optimized solutions. As a solution specialized in energy data, the company has won the first place in 'Big data competition' hosted by Korea Electric Power Corp., ParanEnergy is conducting power trading in apartments for the first time in Korea, and has entered demand response markets with small and medium DR and national DR to provide various energy solutions.

1	Tech	&	Serv	/ice	Info
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Core Al	☐ Visual Intelligence	☐ Sound Intelligence		☐ Language Intelligence
	■ Data Driven / Modeling	☐ Data Processing		☐ Hardware / Robotics
	☐ Reinforcement learning	☐ Autonomous driving		☐ AGI
	☐ AEI	□XAI		☐ Etc
Framework	Hyperledger(Private BlockChain), TensorFlow, M	xNet	Data type & secure	Time series data(self)

Company's Core Al Explain

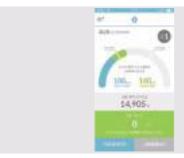
ParanEnergy provides services utilized in various fields of artificial intelligence technology for demand management and energy management. Artificial intelligence technology is being used to collect energy data through IoT equipment, analyze energy patterns, predict usage, cluster, and recommend power transactions. Blockchain is being applied for energy trading. Users can check their energy use through the web and app.

Product and Service Overview

Check real-time usage in 5 minutes
Confirm current progressive stage
Delivers forecast usage for the month
Electricity prices for the month ahead
Earnings from Power Transactions in the Month
Check the status of the power trading market



- 2018.11.12 Paranhome mobile app sevice(Android, iOS)
- 2019.03.28. Korea Electric Power Corporation. "New Service Development Competition Using Energy Data" 1stplace
- 2019.05.13 Paranstore mobile app sevice(Android, iOS)









Business model	Provide power trading services for apartments, provide electricity transaction fees and opportunities for commercial businesses around apartments, and participate in national DR. Incentives from small and medium-sized DR market participation while providing energy management services for stores and small factories
Target market	Domestic Apartment Housing / 16,502 Parks, 9,830,840 Low-pressuresubscriberforgeneraluse/3million.
Customers	N/A
	-

Future plan

Register of 4MW Demand Response Resources for Small and Medium-sized DRs (December 1919)

Expanding the contract for power trading services in apartments (currently 2 units -> 20 units, until December 2020)

Blue Store Service Subscribers (currently 30 -> 200, through December 2020)

Name	Paranenergy Inc.	Establishment	In 2018	C.E.O	SeongCheol Kim
Phone	+82 31-707-0188	E-mail info@paranenergy.com			n
Main Business Field		Energy Management and Energy Solution			
Main Product and Service		Paranhome, Pa	ranstore, Para	anDR	
Investment history		N/A			



PDXen Biosystems Co.

www.pdxen.com

Company Identity

We provide solutions for clinical unmet need in the field of healthcare through the Al platform for early diagnosis and prediction of intractable disease. In particular, we are focusing on providing information and technology of the artificial intelligence platform to establish treatment guidelines in the field of health care, which has been suggested as a social issue.

☐ Tech & Service Info

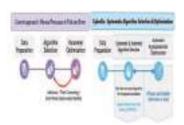
Core Al	☐ Visual Intelligence	☐ Sound Intelligence		☐ Language Intelligence
	■ Data Driven / Modeling	■ Data Processing		☐ Hardware / Robotics
	■ Reinforcement learning	☐ Autonomous driving		■ AGI
	☐ AEI	□XAI		☐ Etc
Cuore ou oul	CybroDY Diable	Data trusa (1 sasura	Clinical Data, Blood test,	
Framework	CybreDX, Diablo	Data type & secure		netic etc

Company's Core Al Explain

- Integrated predictioins engine including clinical information
- Automatic algorithm & Self-adaptive artificial algorithm
- Visualization Toos

Product and Service Overview

- Early diagnosis and prediction of intractable bowel disease
- -Risk Prediction
- -Providing information that affects risk
- -Self-Adaptive algorithm model & Automatic Hyperparameter oprimization
- -Systematic & Automatic algorithm







- 2018.12.09 ASCB/EMBO 2018 meeting
- 2019.04.24. ICT Technology commercialization festival
- 2017.03.08 1st Medical Big Data Analysis Contest
- 2017.03.08 1st Medical Big Data Analysis Contest











Business model	License
Target market	The market for early diagnosis and prognosis of intractable bowel
	disease and dementia is expected to secure 3 trillion won in 2050.
Customers	hospital, laboratory (1+1 Regenerative medicine Co.)

Future plan

Providing early diagnosis and prognostic services for patients with intractable bowel disease and dementia

Name	PDXen Biosystems Co.	Establisment	In 2013	C.E.O	Kwang-Sung Ahn
Phone	+82 461-3671	E-mail pdxen@pdxen.com			
Main Business Field		New drug development, Biomarkers for diagnosis and prognosis			
Main Product and Service		CybreDX, Exosome, Biomarkers based CTC			
Investment history		0.4 million			



PersonaSystem Co., Ltd.

www.bottalks.co.kr

Company	Identity
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Persona system is a company for conversational AI platform, which is the innovative source technology in AI area, has successfully localized the conversational platform after three years of research and development, leading the innovation in Fin-Tech with NLP(natural language processing) specialized in Korean, NLG (natural language generation), chatbot with deep learning technology, and AI Kiosk technology.

	Tech	&	Service	Info
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	☐ Visual Intelligence		☐ Sound Intelligence		■ Language Intelligence
	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics
Core Al	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI
□ AEI			□ XAI		☐ Etc
Framework	Tensorflow	Data type & secure		etri data, customer data, and open data utilization data mining (self-assurance)	

Company's Core Al Explain

The advantages of our chatbot are ① high recognition rate of Korean, contextual recognition, previous conversation memorization, dialect recognition, and real interactive conversation. (Korean recognition rate 100%, response time 0.43 seconds as a result of KOLAS international certification test). ② Built-in NLG technology that automatically generates more than 100,000 learning data, shortening the installation period and reducing costs. ③ No security issue with on-premise chatbot using its own interactive platform. Additionally we developed the Al Kiosk controlled by voice using the conversation technology with the VR character (PCT applied) first time in Korea. It is expected to improve for ease of use for the old and the disabled in the finance industry.

Product and Service Overview

☐ The conversational AI platform is rapidly expanding its utilization areas which include chatbots, kiosks, voicebots (unmanned contact centers), RPA, robots, robo-advisors, smart cities, smart homes, smart factories, and connected cars. We are leading the innovation using the conversational AI platform, which is the source technology in Fin-Tech, and we are selling chatbots (on-premise type, cloud), voicebots, and AI kiosks applying our own AI platform.

Product and Service Image

See Business Info

- 2017.12 Awarded the excellent prize for K-Global Smart media Business by Ministry of Science and ICT
- 2018.01 Selected as K-Global 300 ICT Promising company/ Awarded Parliament Member Prize (special prize for the 4th industry)
- 2018.05 Selected as the Venture Camp of Technology Guarantee Fund /1st prize
- 2019.04 Selected as First Penguin type company by Credit Guarantee Fund
- 2019.05 Awarded 2019 Fin-Tech Awards Innovation prize in Korea Fin-Tech Week.





Business model	Sales of AI solution, Saas applications, voice-activated Kiosk
Target market	Global conversational AI platform market is expected to reach USD 15 Billion in 2024 from USD 3.2 Billion in 2018 with CAGR 30.2 % by P & S Intelligence.
Customers	Hyundai HCN,Korea Polytechnics University,Deus Company,Korea Certification Service, Korea Gas Corporation,Financial Service Commission

Future plan

Voicebot (TM 'Callbot') is a chatbot combined with a voice engine, is expected to grow rapidly from next year due to its convenience in which UI is shown same as a phone, and talking by voice. In the insurance area, we plan to provide "AI Insurance Robo-teller" using Voicebot through Innovative Financial Services with DB Insurance early next year. Through this, insurance companies can filter out potential customers and find new customers, moreover reduce the emotional labor of counselors.

Name	PersonaSystem Co., Ltd.	Establishment	In 2017	C.E.O	Seungjae, Yoo
Phone	+82 2-762-8713	E-mail	admin@b	ottalks.co.	kr
Main Business Field		Fin-Tech, Chatl	bot, Al kios	sk	
Main Product and Service		BOTTALKS, CALLBOT, DEEPTALK, ROCHA.AI, CHATCLOUD			
Investment history		1 Billion (Dynamic Technology Investment Corporation, 2018) 500 million (MGARS Investment Union, 2019)			



PI IP LAW

www.piip.co.kr

Company	Identity

As a Korean IP law firm, PI IP LAW (LEE, PARK & MORRIS) is a matchlessly competitive firm in AI (deep learning). PI IP LAW is a specialized firm in software and was recognized as one of the top 15 filers by KIPO's Computer Program Examining Department in 2015 which was only 3 years from its foundation. we publish AI Patent Maps and are suggesting a new standard of AI patent and rotationally organizing seminars in regards with AI patents.

	Tech	&	Service	Info
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Core Al	☐ Visual Intelligence			☐ Sound Intelligence		☐ Language Intelligence
	☐ Data Driven / Modeling			☐ Data Processing		☐ Hardware / Robotics
	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI	
	□ AEI			□ XAI		■ Etc
Framewo	rk	Tensorflow	Data	a type & secure	pe & secure Patent Analysis Result (Self acquired)	

Company's Core Al Explain

Application, registration, R & D, litigation, technology commercialization, seminar of intellectual property rights related to artificial intelligence technology

Product and Service Overview

1. Patent Application

PI IP LAW (LEE, PARK & MORRIS) is operating an AI Patent team with unrivaled artificial intelligence technology understanding. The AI Patent team of PI IP LAW provides strategic patent portfolio service based on its unrivaled expertise.

2. Technology Evaluation and Patent Consulting

We hold a unique position in Al Patent consulting, and have conducted Al patent consulting projects since 2013, corresponding to 16 projects in total with a value of 600,000,000.00 KRW. Since 2019, we are providing Al Technology Evaluation Reports to financial institutions for investment purposes, based on patent portfolios, taking advantage of the unrivaled technological understanding and analysis skills of PI IP LAW.

3. Prosecution and Disputes

To proceed with prosecution and disputes, PI IP LAW (LEE, PARK & MORRIS) IP law firm also established PI IP LAW (LEE, PARK & MORRIS) law firm as an affiliate, and attorneys from both firms handle prosecution matters as a team. In the field of IP, we provide top litigation services like other top law firms in Korea through our affiliate law firm.

Product and Service Image	
	N/A

- Recognized as one of the top 100 Al Start-up (Korea Artificial Intelligence Association)





Business model	Legal service (Intellectual Property)					
	- An estimated 10.9 million of tradem	ark applications have been filed on				
	2018, this is an increase of 1.7 millior	cases and 19.2% of growth compare				
	to 2017.					
	- In IP services, the introduction of te	chnology has been relatively delayed,				
Target market	but with the recent ICT technology de	evelopment and the AI, the				
	convergence of the intellectual proper	ty industry and technology will be				
	stimulated.					
	- Intellectual property service work will be automated and more efficient,					
	and service quality and customer experience will be improved.					
	SUALAB (Republic of Korea),	Elgen (Republic of Korea), chatbot				
	Machine vision	SIA (Republic of Korea), Satellite image analysis				
	MakinaRocks (Republic of Korea),					
	Factory automatization	NATOMICS (the United States),				
Customers	Selvas AI (Republic of Korea), Voice	Medical treatment				
	recognition					
	TmaxSoft (Republic of Korea)	BAIDU (China), Internet service				
	TmaxData (Republic of Korea, DBMS	XIAOMI (China), Mobile device				
	TmaxOS (Republic of Korea), OS	OPPO (China), Mobile device				
Future plan						

Based on IP flatform business development of Sejin Mind Co., Ltd., through establishing local firms in the IP5 (China, Japan, US, EU and Korea) PI IP LAW is growing as a global IP service provider.

Name	PI IP LAW	Establishment	In 2013	C.E.O	Daeho LEE	
Phone	+82 2-6745-0410	E-mail	piip@piip.co.kr			
Main Business Field		Intellectual property service				
Main Product and Service		Intellectual property application, registration, R & D, litigation, technology commercialization, seminar				
Investment history		0KRW				



PIXEL Display Inc.

pixeldp.com

Company	Identity

Pixel Display is a company that creates AI based eye examination with mobile devices. Pixel implemented this technology on mobile devices only and after 6 months from the start, we invented AI mobile eye examination solution for refractive errors, which can be done by photography.

☐ Tech & Service Info

Core Al	■ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
	☐ Reinforcement learning		☐ Autonomous driving		■ AGI	
	□ AEI		□XAI		☐ Etc	
Frameworl	Tensorflow	Data type & secure		studyi	ng clinical research	

Company's Core Al Explain

Our core technology is to inject smartphone flashlights into the eyes and analyze the result. It is represented by different image patterns depending on the human eyes and analyzed to determine the risk of refractive error and eye disease. Also, It could recognize accurately mobile photos with low resolution and high noise levels as good photos to be analyzed reflections. Both of these technologies have been patented in Korea and are being patented in US, Europe, and China.

Product and Service Overview

Our product called KIZOPTER can be tested by simply taking two photos with a smartphone for eye disease and refractive errors. This makes it easy to run eye tests at home in case of myopia, astigmatism, hypermetropia, amblyopia, and anisopia.



- PIXEL Display's Team member
- 2018.11.01. Health Industry KSPA Award
- 2018.05.24 World IT Show 'Innovation Award'
- 2017.10.14. 4th K-Demo Day China @ Alibabacloud Final Winner









Business model	Solution Licensing			
Target market	We are currently focusing on entering the pediatric eye test market. It is			
	used as an eye screening solution for children in developing countries to			
	resolve health inequality. Especially India is our initial market and could be			
	occupied 270 million cases in a year.			
Customers Hospital, Local government, Insurance company				
Future plan				

We will keep trying to enter global markets, focusing on countries that are vulnerable to healthcare after India. In the future, our optometric technology will be extended to solutions that can be screened for cataracts, strabismus and glaucoma as well as refractive anomalies.

Name	PIXEL Dispaly Inc	Establishment	In 2016	C.E.O	Teahyeon Kwon	
Phone	+82-2-6956-0920	E-mail info@pixeldp.com				
Main Bus	iness Field	Healthcare / Al				
Main Pro	duct and Service	Al Based Eye Screening Platform Using Mobile Photography				
Investmen	nt history	N/A				



Pixelscope

www.pxscope.com

☐ Company Identity

To obtain and easily transmit accurate data by measuring the movement of the ball and the athlete using slow motion imaging and 3D contents instead of the current training method that depends on 'instinct' and 'experience'.

□ Tech & Service Info

Core Al	■ Visual Intelligence			☐ Sound Intelligence		☐ Language Intelligence	
	■ Data Driven / Modeling			■ Data Processing		■ Hardware / Robotics	
	■ Reinforcement learning			☐ Autonomous driving		□ AGI	
	□ AEI			□XAI		☐ Etc	
Framework		Tensorflow, Caffe		Data type & secure	Sı	ports Video and Metadata ktracted from it	

Company's Core Al Explain

We analyze and extract detailed information such as the speed, the number of revolutions, the direction of rotation, the attitude of the player, and the motion of the player from the high resolution image obtained from the high speed camera using artificial intelligence technology.

Product and Service Overview

We provide sensors and space-optimized solutions based on Mixed Reality that have been specifically formatted for content development.



- 2019.06.03. Selected as Frontier Venture Company
- 2019.06.01. Grand Prize in the platform category of Seoul VR-AR AWARD 2019





Business model	Provide Sensor Platform
Target market	 Training System for Professional athletes and coaches Youth & Life Sports Market Supporting Space Providers and Content Developers
Customers	Golfzon, Intel, SBS Sports, SK Wyverns, Hundai Capital Skywalkers, etc.

Future plan

Customer Communication, Commercialization of space and module sales form, Domestic sales office

Name	Pixelscope	Establishment	In 2018	C.E.O	Kei, Kwon	
Phone	+82 2 6264 0700	E-mail	info@pxscope.com			
Main Business Field		Sports analysis system, Sportainment, Screen Simulator Sensor and Provide Sensor Platform				
Main Product and Service		Smart Scope / Training Scope / Virtual Scope / Referee Scope, S(SB)-Sensor, TableMan and MRS PLATFORM				
Investment history		N/A				



Pocket Memory Co., Ltd

www.pocketmemory.co.kr

Company Identity

Pocket Memory creates new value and pioneers markets by applying interactive Al based on NLP(Natural Language Processing) and real-time voice recognition technology into various areas such as Al assistant, Al personal stylist (beauty Curation) and Digital Heritage.

☐ Tech & Service Info

Come Al	■ Visual Intelligence		■ Sound Intelligence		■Language Intelligence	
	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
Core Al	☐ Reinforceme	ent learning	☐ Autonomous driving		☐ AGI	
	☐ AEI		☐ XAI		■ Etc	
Framewo	rk N/A	Data type	& secure	Image files,	Voice files (self-acquired)	

Company's Core Al Explain

Convergence content that rapidly processes voice recognition, synthesis, and analysis at a time. (Improved interactive elements and immersion in a high-quality, high-capacity data transferable environment) / Speech Recognition and speech synthesis using NLP(natural language processing), TTS and STT.

Product and Service Overview

- **-Al Pory**: A cloud-based Al service that enables natural language-based conversations from fun daily conversations to providing a wide rage of information on institutions, facilities and touristic places (run on kiosks).
- **-Al Personal stylist**: Voice recognition-based Al curation content that provides customized makeup and styling according to individual skin tone and fit through analysis of the user's personal color (Korean Cosmetics & Styling suggestion).
- **-Digital Heritage :** An AI service that provides a realistic conversation experience with historical figures in the past through natural language-based communication technology. Optimalized for education, tourism, and local promotional purposes.







- 2019.02.01 Installed Monk. Hyecho conversational AI content in 'Gyeongju Hwarang theme park'
- 2019.02.01 Installed King. Varxuman conversational Al content in 'Silk Road digital experience zone, Gyeongju Hwabaek convention center'
- 2019.07.28 Participated in 'Korea VR/AR Meet-up in L.A' with 'Mirror Mirror' Al beauty curation content
- 2019.09.23 Participated in 'K-Global@Silicon valley 2019' with 'Mirror Mirror' Al beauty curation content 'Mirror Mirror'









Business model	SW/HW Combination, License, Liaise with the retail and distribution industry
business inlouer	for in-app payment (subscription type of sales)
	-Domestic and Asian Al Assistant (for institutions, enterprises) market (\$80
Target market	billion)
	-Domestic and Asian Al Beauty curation market (\$500 billion)
	-Institutions, enterprises, etc. who require interactive/conversational Al
Customers	assistant
Customers	-Enterprises, individuals who require personal color analysis and cosmetics,
	styling suggestions.
	Future plan

-Design revenue models through partnerships with relevant companies (Huawei, HLDS, Q-pora, etc.) and Liaise with the retail and distribution industry.

-Business expansion through advancement of development technology.

Name	Pocket Memory Co., Ltd.	Establishment	In 2014	C.E.O	Cho Yongseok	
Phone	+82-2-2088-1855	E-mail	webmaster@pocketmemory.co.kr			
Main Business Field		Al / VR / AR contents development and supply				
Main Pro	duct and Service	Al Pory, Mirror Mirror				
Investmen	nt history	N/A				



Pulse9 inc

www.pulse9studio.com

	mpany	Identity
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Pulse9 is an AI company that services customized digital imaging AI for innovating the graphics field. The AI Art Gallery "A/I/A" has lauched and on October 31 2019. It's developing AI can create the content that humans want.

☐ Tech & Service Info

Core Al	■ Vis	ual Intelligence	☐ Sound Intelligence		☐ Language Intelligence	
	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
	☐ Rei	☐ Reinforcement learning		onomous driving	□ AGI	
	□ AEI		□XAI		☐ Etc	
F		Pytorch, Torch,		Data type &	image, text (web crwal,	
Framewo	rĸ	Tensorflow		secure	데이터 제휴)	

Company's Core Al Explain

Our Al makes graphic processing based on a style transfer. This allows unlimited styles from example images by machine learning. From correcting the original image tones and colors to reinterpreting the style to create a new image. Each layers make feature extractions and reconstructions. It's using the method of minimizing content loss and style loss from the extracted feature map. And it optimizes and machine learning the intelligence for aesthetics of human being.

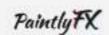
Product and Service Overview

'Illustration Solution, Paintly Al', 'Exhibition Event Contents Solution Paintly Scene', 'Webtoon Solution, Paintley Toon', 'Video Effect Solution, Paintly FX', Al Artist 'Imagine Al' An Al artist 'imagine Al' and customizing Al digital imaging solution package Paintly, and has a line-up for revolutionizes the graphic field that cartoons to artworks. The solution can generate pictures, just one second. It is work for customizing goods, videos, and webtoon exhibition events.

Product and Service Image



'Illustration Solution, Paintly Al'





'Video Effect Solution, Paintly FX'



Al fine art artist 'Imagine Al



AI ART GALLARY 'A/I/A'-

- 2017.07.22 1st Seoul Innovation Challenge Bronze (Seoul Mayor Award, 100 million injuries)
- 2017.12.01 1st Industrial Intelligence Startup Contest, Bronze (President Award of Artificial Intelligence Association, 3 million won)
- 2019.09.26 Launched Imagine Al
- 2019.09.26 Launched world's first human X AI collaboration <Commune with> series
- 2019.10.31 Launched the world's first Al X Human art platform AlA Gallery
- 2019.11.05 Launched <Paintley Scene>, Soma Museum of Art, Seoul
- 2019.11.09 < Commune with > Pen drawing works 10 million won / crowd funding









Business model	Online to Offline Content Business - Solution Sales and Subscription
Target market	2000 trillion / total global contents market
Customers	Over 100 trillion in domestic market, B2C and B2B

Future plan

Supply chain build for Al graphic processing solutions for the contents making business. Our solutions'll be covered whole 2D graphics fields from the webtoon to the video. There are market expansion strategy with Al art gallery, "A/I/A". Our Al business in the gallery business area, including education and art exhibitions with emerging artists.

Name	Pulse 9 inc	Establishment	In 2017	C.E.O	Jenna Park	
Phone	+82 10-8839-8441	E-mail	info@pulse9stuc	lio.com		
Main Business Field Al graphic solutions & contents			service			
		'Illustration Solution, Paintly AI', 'Exhibition Event				
Main Pro	duct and Service	Contents Solution Paintly Scene', 'Webtoon Solution,				
Name		Paintley Toon', 'Video Effect Solution, Paintly FX', AI				
fine art artist 'Imagine Al'						
Investmer	nt history	400K\$, Angel investment				



QARAsoft

www.qara.kr/www.qara.ai

Company Identity

QARAsoft Inc. is a fintech startup based in South Korea providing financial investment guidance through our Al deep learning technology.

☐ Tech & Service Info

	■ Visual Intelligence	☐ Sound Intelligence		■ Language Intelligence	
Core Al	■ Data Driven / Modeling	☐ Data Processing		☐ Hardware / Robotics	
Core Ai	■ Reinforcement learning	☐ Autonomous drivir	ng	☐ AGI	
	☐ AEI	■ AI		☐ Etc	
Framework	Tensorflow, Keras	Data type & secure	Self-	sourced & Data vendors	

Company's Core Al Explain

QARAsoft's Al deep learning engine "Market Dreamer" conducts algorithmic collection and analyses of more than 1.4 billion datasets across the past 30 years of market history. Developed by our Al Scientists and Software Engineers, our Al technology led QARAsoft to be appointed by Gartner as a "Cool Vendor" in Al for Fintech in Asia/Pacific in 2019.

Product and Service Overview

*Product Name: KOSHO

*Product Feature: A hybrid financial product that offers combined services of securities and asset management firms at the convenience of a mobile application. *Description: Powered by Market Dreamer, KOSHO provides users with analyses and predictions of over 30,000 global stocks, financial indices, and cryptocurrencies in intervals of 1 week, 1 month, and 3 months. Our AI engine conducts machine learning of past market movements to identify similar patterns in the present and make calculated predictions for the future.



- 2019.02 Selected as 2018 DNA Top 100 Innovators by the National Information Society Agency(NIA)
- 2018.12 Received the 2018 Korea Enterprise Innovation Award from Money Today
- 2017.12 Nominated as 2018 First Good Brand by Dong-a Ilbo
- 2016.10 Won the Grand Prize at KOSCOM Open API Fintech Contest









Business Model Monthly subscription model						
Taxaat Markat	5.6 million retail investors contributing to 6 trillion won revenue					
Target Market within the domestic financial industry						
80% domestic, 20% foreign clients						
Customers	(Latest update in November 2019)					
Future plan						

We are working towards allowing customers to link their securities accounts on KOSHO to buy/sell global stocks directly on the mobile app. We are also planning to integrate an investment guide function to help customers check on the market based on our Al technology. With these additional functions, we aim to provide users with unprecedented convenience and affordability in the investment guidance service industry.

Name QARAsoft Inc.		Establishment	In 2014	C.E.O	Luke ChangHwan Byun	
Phone +82 2-6080-8121~2						
Main Business Field		Investment advisory services				
Main Product and Service		Deep Learning Al Advisor "KOSHO"			O"	
Investmen	t history	Total USD1.4M				

QRAFT Qraft Technologies, Inc.

www.graftec.com

Qraft Technologies, Inc. develops deep-learning technology specialized in finance and investment area. Qraft redefines the value chain in the asset management field from Robo-advisor to Robo-fund, to Robo-trader.

	Table	0	Service	16.
	recn	œ	Service	mio

	☐ Visual Intelligence			☐ Sound Intelligence		☐ Language Intelligence
	■ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics	
	Reinforcement learning		☐ Autonomous driving		■AGI	
	□ AEI		☐ XAI		Etc	
Framework		Q-DNN		type & cure	Purchase data such as Thoms third party mar	through various channels on Reuters, Bloomberg, or kets

Company's Core Al Explain

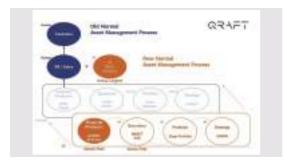
- (1) Qraft Multi-Channel Feature Extraction Deep Neural Network for Financial Data (Q-DNN)
- (2) Deep Reinforcement Learning with Adversarial Multi Actors for Financial Data (Q-DRL)
- (3) Qraft Asynchronous Multi-Network Training Engine (QAMTE)
- (4) Uncertainty Quantification
- (5) Multi Genetic Algorithm for Hyper-parameter Tuning
- (6) Qraft Reward Function Targeted Deep Neural Network Framework for Financial Data

Product and Service Overview

- (1) Robo-advisor
- Asset management service that builds investment portfolio and rebalances regularly based on market conditions
- (2) AI ETF
- The QRAFT AI Enhanced U.S. Large Cap ETF (QRFT) is an actively managed exchange-traded fund which aims to provide investors with long-term capital appreciation by utilizing a proprietary artificial intelligence system to select large-capitalization U.S. stocks to be held in the portfolio.
- (3) AXE(AI Execution Engine)
- Korean-first Al-based trade execution optimization engine.

Product and Service Image

See Business Info









Business model	SaaS					
	(1) Robo Advisor					
	- Korean robo-advisory market is expected to grow upto 30 trillion won by					
2025. (Hana Bank)						
	- Qraft Technologies aims to grow with the whole market, maintaining					
Target market	current market share.					
	(2) AI ETF - The global ETF / ETP market has grown at an annual average					
	rate of more than 20% over the last decade to the size of US \$ 5.2tn as					
	of January 2019 Qraft Technologies aims to grow as the world best Al					
	ETF brand, expanding AI ETF lineups.					
	Mirae Asset Investment, KEB Hana Bank, Shinhan Bank, Industrial Bank of					
Customers	Korea, BNK Busan Bank, BNK Gyungnam Bank, Shinhan Investment, Pine					
	Asia Asset Management, Horizons ETFs, BNK Asset Management					
	Future plan					

- Launching follow-up AI ETFs Lineups
- Exporting Al Execution Optimization Engine
- Commercialization of Trade Optimization Engine for FX and procurement

Name	Qraft Technologies, Inc.	Establishment	In 2016	C.E.O	Hyung-sik Kim	
Phone	+82-2-487-8555	E-mail	qraft@qra	iftec.con	า	
Main Busi	ness Field	Robo-advisor, Al execution engine, Al ETFs, financial solutions using deep-learning technology				
Main Prod	duct and Service	QRAFT AI-ENHANCED ETF, AXE(AI Execution Engine), Qraft Deep Asset Allocation				
Investmen	t history	11 billion won (Delta Al Unicorn Investment Association '19)				



Rainbow Brain Co., LTD

www.rbrain.co.kr

Company Identity

Rainbow Brain, established in 2012, is a major company leading RPA industry domestically which provides superior functionality with development and implementation of AI and automation solution.

Under the mission of 'lead coexistence of Human and Ai in the workforce', Rainbow Brain has RPA · AI experts consisting of RPA · AI architects, process analysts, and engineers.

☐ Tech & Service Info

Framework Automation Anywhere, Data type & secure to automate the		■ Visual Intelligence	☐ Sound Intelligence	■ Language Intelligence
□ Reinforcement learning □ Autonomous driving □ AGI □ AEI □ XAI ■ Etc (RPA) Training data & process to automate the	Core Al	☐ Data Driven / Modeling	☐ Data Processing	☐ Hardware / Robotics
Framework Automation Anywhere, Data type & secure Training data & process to automate the		☐ Reinforcement learning	☐ Autonomous driving	☐ AGI
Framework Automation Anywhere, Data type & secure to automate the		☐ AEI	□XAI	■ Etc (RPA)
process	Framework		Data type & secure	business working

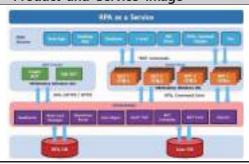
Company's Core Al Explain

Throughout RPA and chatbot technologies, Rainbow Brain provides unmanned Ai worker Cloud Service for both individuals and corporations within common works

Product and Service Overview

- 1) Throughout RPA and chatbot technologies, Rainbow Brain provides unmanned Al Worker Cloud Service for both individuals and corporations within common works.
- 2) Provides dashboard that visualizes analyzing and monitoring SW robots' performance on business perspectives.
- 3) Since RPA can be run in any circumstances, RPA can be under control by single security system

Product and Service Image



Also, it has over 40 reference cases that cover manufacturing, distribution, and finance industry. Rainbow Brain has its own knowhow to persuade customers who hesitate on adopting RPA · Al and its proactive participation on the whole process of RPA · Al · DataHub(work selection, process comprehension, and stabilization)has been changing decision-makers' perspective towards digital workforce.

- '19. 08. holds IoT, Securities, Ai industry patent (total 10 of them)
- '18. 10. Selected Ministry of SMEs R&D (RPA development)









Business model	RPA implementation, consulting, development, AI SW service					
business model	development, Gitple Chatbot solution development					
Increasing the portion of distribution industry from 20% to 30%,						
Target market out of BIG 5 corporation in manufacturing industry has confirmed the expansion of project						
Customers	Savings Bank, Lotte rental Co, Ministry of Food and Drug Safety,					
	NICE holdings, Central Co, DAIYANG Metal Co, Edwards Korea Ltd					
Future plan						

- 1) Expanding market volume with extension of implementation by 2021
- 2) Extends Automated Cloud service within Ai and RPA
- 3) Enlarge engineer-training system and nurturing business of development of manpower
- 4) Entering overseas market starting with Southeast Asia

Name	Rainbow Brain Co., LTD	Establishment	In 2012	C.E.O	Hyounho Park	
Phone +82 70-4680-6090		E-mail contact@rbrain.co.kr				
Main Business Field		RPA implementation and development				
Main Product and Service		RPA solution by Automation Anywhere				
Investment history		Private				



RD Project Corp.

www.rdproject.kr

Company Identity

RD Project is a company specializing in data collection and processing for Al engine production. With our global data labs in Ghana and South Korea, we can provide accurate and secure data processing services at reasonable price.

Tech &	& S	ervic	e Info
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	☐ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence
Core Al	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics
	■ Reinforcement learning		☐ Autonomous driving		☐ AGI
	□ AEI		☐ XAI		☐ Etc
Framework	N/A	Data type & secure		Utilizing customer's data or self-collection according to purpose of use	

Company's Core Al Explain

1. Image

- **1-1) Semantic Segmentation**: Label along the boundaries of all objects in videos or images. When developing autonomous ship service, it can be used to learn by labeling sea level boundary, boundary with other vessels, pier boundary in the image.
- **1-2) Bounding Box:** Specify an object in the image or image and label what that object is. In the development of autonomous cars, it can be used to learn whether things in front of them are pedestrians, cars or signs.
- **1-3) Polygon, Polyline**: Label what an object is based on the boundaries of the object in the video or image. In the development of autonomous cars, it can be used to learn whether the road image is a lane or a directional sign.
- **1-4) Point (Landmark)**: Label by drawing points along the boundaries of objects in the video or image. It can be used to detect facial features, expressions, emotions, etc. or to detect people and motions for sports analysis.

2. Audio

- **2-1) Audio Slicing**: Separate audio files according to the conditions. When developing voice Al service, it is possible to classify sound sources according to the speaker and remove noise sections, and can be used to learn Al based on this.
- **2-2) Audio to Text**: This is a transcription to write down the contents of the sound source file. It can be used to train voice AI services by converting voice files into text. We currently offer English and Korean services.
- **2-3) Pronunciation Dictionary**: This function is used to replace the different pronunciations of various speakers in the sound source file with the standard pronunciation.
- **2-4)** We have other technologies such as the implementation of contextual text in spoken form under certain conditions. We also have 'Advanced Audio Labeling' technology that allows for more advanced labeling than simple source file separation or transcription.

Product and Service Overview

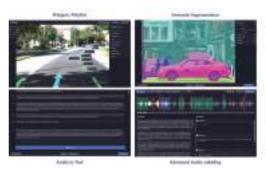
- RD Project's Datamaker is a global data processing platform for artificial intelligence learning.
- 1. In the data labs of South Korea and Ghana, data processing and inspection is carried out in a working environment with strong security devices that prevent data export and leakage.
- 2. Our multi-inspection system ensures high accuracy of product quality.
- 3. Datamaker provides data processing service at an overwhelmingly low price by using Ghanaian workers and self-developed pre-labeling software.
- 4. By using self-developed labeling software, customized processing of audio, image and video data is possible.

Product and Service Image

See Business Info

- 2019 Selected as a "Data Voucher" Supplier by K-data









Business model	B2B, SaaS			
Target market	- Data processing market estimated to account for more than 10%			
rarget market	of the AI market expected to grow to \$ 90 billion annually by 2025			
	Since its official launch in May 2019, we have been supplying			
Contour	processing data to more than 30 artificial intelligence development			
Customers	companies and research institutes such as KAIST, Seadronix, and			
	Puzzle A.I.			

Future plan

We will provide artificial intelligence developers in domestic and overseas markets with high quality data processing services at an overwhelmingly low price, and create high quality jobs in developing countries to develop CSR with multinational companies.

Name	RD Project Corp.	Establishment	In 2018	C.E.O	Enoch, Lee	
Phone	+82 10-5001-2545	E-mail	minjoo.lee@rdpr	oject.kr		
Main Business Field		data acquisition and processing				
Main Product and Service		Datamaker				
Investment history		20,000,000 KRW (CompanyD, 2019)				



Riiid

ww.riiid.co

	Compa	nv I	lde	ntitv
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Riiid is a global leading Al Tutor solution provider delivering creative disruption to the education market through its cutting-edge Al technology. Leveraging the firm's highly scalable and proven Al solution, the firm is aggressively expanding its business to new test areas as well as into new geographical markets. It currently operates Santa TOEIC in Korea and Japan while having launched Santa SAT in Vietnam.

□ Tech & Service Info

	☐ Vis	ual Intelligence	☐ Soui	nd Intelligence	☐ Language Intelligence	
Core Al		a Driven / Modeling	■ Data	Processing	☐ Hardware / Robotics	
Core Ai	Reinforcement learning		☐ Autonomous driving		☐ AGI	
	☐ AEI		□ XAI		☐ Etc	
Framewo	rk	TensorFlow, PyTorch Spark	1,	Data type & secure	User's response data / secure it's own	

Company's Core Al Explain

Riiid's cutting-edge AI technology provides personalized optimal learning solution while suggesting the quickest way to boost scores. Largely, Riiid's AI plays two crucial roles - Analysis/prediction and recommendation. Every time a student solves a question, AI analyzes that data in real-time by studying the learning patterns of both the student giving the test as well as the other users and then predict if the student's answer to the next question will be right or wrong. At the same time, the solution also predicts which option the student will pick with 90 percent accuracy in real-time. Then, Riiid's deep learning technology recognizes and recommends learning contents that can maximize predicted score increase while also motivating students to study more.

Product and Service Overview

Santa TOEIC is a mobile/web-based all-in-one AI learning platform for TOEIC. Santa TOEIC provides 1:1 optimized curriculum based on what are the essential questions and lectures for each user to boost scores. The solution offers 13,000 of questions, 500 lectures, and other learning tools such as wrong answer notes, vocabulary notes, and etc



- 2019. 10 Top 10 EdTech Startups in APAC 2019/ Education Technology Insights
- 2018. 12 Korea Internet Awards 2018 Leading Technology/ Ministry of Science and ICT
- 2018. 05 25 Hottest APAC Artificial Intelligence Companies 2018/ CIO Advisor









Business model	Provide personalized learning solutions with AI technology			
Target market	Global Test-Prep market / \$280 billion			
Customers	Customers Private			
Future plan				

Riiid aims at expanding its Al solution, Santa Inside, into every major testing area such as driver's license exam, public official exams, TOEFL, ACT and etc, thus to provide the most efficient learning solution for everyone with Al tutor

Name	Riiid	Establishment	In 2014	C.E.O	Jang, Young-Jun	
Phone	+82 2-6929-1392	E-mail	partnership@	Driiid.co		
Main Bu	siness Field	Al, edutech				
Main Product and Service		Al tutor 'SANTA TOEIC'				
Investme	ent history	others) FY 2018 Invested an	nount 10,476 i	Mil KRW(KI	V(Premier Partners & 4 PVC & 4 others) W(DSC Investment & 2	



ScalaWox Inc.

www.scalawox.com

Company Identity

Based on GPU software acceleration technology, we offer a variety of forms of artificial intelligence solutions. In particular, we are responding to various types of technology needs in the field by providing unstructured data classification and recognition technology using images and failure classification and prediction technology through data analysis.

☐ Tech & Service Info

Framewo	rk TensorFlow, Caffe	Data type & secure	Self, 3D Simulator
	□ AEI	□XAI	☐ Etc
Core Ai	■ Reinforcement learning	☐ Autonomous driving	□ AGI
Core Al	■ Data Driven / Modeling	■ Data Processing	☐ Hardware / Robotics
	■ Visual Intelligence	☐ Sound Intelligence	☐ Language Intelligence

Company's Core Al Explain

Artificial Intelligence Fault Analysis and Prediction by Time Series or General Data Analysis, and Behavior Recognition by GAN and Object Detection Image Analysis

Product and Service Overview

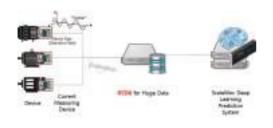
- 1. Analyze and predict system

 - 1) Data analysis and modeling 2) Prediction of deep learning based failures
- 2. Al Large Waste Processing System
 - 1) KakaoPlusFriends: SNS Chatting System Support
 - 2) Payment and refund system 3) Automatic classification of waste through photo
- 3. Object Detection System based on Edge Computing
 - 1) Support Deep Learning System on Low Specifications Edge System
 - 2) GPU Accelerated and AI Chip based Deep Learning Service

Product and Service Image

1) Data Analytics and Prediction System

2) Al-Waste System







- 2018 EunPyung-Gu Advanced Al-Waste System Development
- 2019 Privatly Led E-Government Service

Business model	HW Combination, License, SI		
	1. Smart Factory: Prediction of Facility Failure		
	- Reliable operation of facilities is required in most sites		
	- Expected to grow in size to around 50 billion in 2 years		
Target market	2. Smart City: Large Waste Processing System		
	- Estimated to be around 20 billion.		
	3. Video Surveillance : Object Detection Edge System		
	- Estimated to be around 10 billion in 1 year		
Customers	Domestic Government, Transportation Corporation, Security		
customers	Service Companies		
	Future plan		

Future plan

- 1. GPU-accelerated technology: Optimization technology helps to operate more efficient artificial intelligence systems
- 2. Artificial Intelligence Technology: The company plans to develop technologies applicable in the field and provide them from edge to server systems.

Name	Scalawox Inc.	Establishment	In 2015	C.E.O	YongSeon Shin	
Phone	hone +82-2-2628-3944 E-mail		scalawox@scalawox.com			
Main Bu	siness Field	Smart City(AI-Waste Processing System), Smart Factory(Failure Classification and Recognition), Surveillance(Behavior Recognition)				
Main Product and Service		Al-Waste Processing System, Failure Classification and Recognition System, Object Detection and Behavior Recognition Edge System				
Investment history		N/A				



Scatter Lab

www.scatterlab.co.kr

Company Identity

'Pingpong' is a open-domain social chat technology for Al. We've launched 'Pingpong Builder' which is a dialogue builder that can easily implement high-quality social chat into conversational Al.

☐ Tech & Service Info

	☐ Visual Intelligence		☐ Sound Intelligence		■ Language Intelligence
□ Data I		a Driven / Modeling	☐ Data Processing		☐ Hardware / Robotics
Core Al	☐ Reinforcement learning		nforcement learning Autonomous driving		■AGI
	■ AEI □ XAI			☐ Etc	
Framework		Dialog-BERT, PyTor	rch,	Data type &	10 billion Kakao Talk
		TensorFlow		secure	messages (KR+JP)

Company's Core Al Explain

Scatter Lab's 'Pingpong' is a open-domain non-task-oriented conversation technology for artificial intelligence. We want to turn conversational Al into a 'being' who has emotional relationships with people through Pingpong.

Product and Service Overview

- * Pingpong Builder is the best way to add small talk capabilities to Al.
- Over 10 billion small talk data
- NLU optimized for small talk

Product and Service Image

Of the last lates	State of the latest and the latest a		.0.				10.00
A root forms side recom-	1000	+	100				
nest Taylor Facilities (NO	Section 2	+	7			-	- 4
reger meets	-	- 4	100	-			
-	(market line)	- 4	191				
We work	94.54 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	- 1			-	- 10-	100

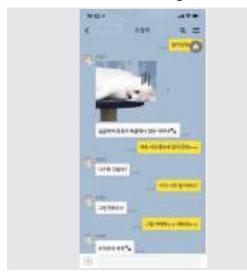
그림 2 Best NLU performance in the market

Auto-reply: Reaction example

Tre gorigin an opey crystee date.	Orrepores
one way the property of widor at late and couldn't exhibit state.	You have be honeyy. Datasen from
Characteristics	Handal
El Walling	there is
g'u briday.	frie militig)
Unit Young for the same. What should list?	Time take

그림 3 Over 90% conversation coverage with reaction model

- 2018.07 Kakaotalk Chatbot 'Dreamy' (Collobaoration with Kakao)
- 2019.02 Luna on Google Assistant (Collaboration with Google Assistant)





Business model	SaaS, Licensing
Target market	Conversational AI market (Chatbot, Virtual Assistant, AI Speaker)
	Hana Bank (Finance)
Customers	Lotte E-Commerce (Commerce)
	NCSOFT (Mobile App)

Future plan

- Launching Pingpong Builder in Japanese and English
- Expansion to global market
- Launching a world-class social AI chatbot that can establish emotional relationship with users

Name	Scatter Lab	Establishment	In 2011	C.E.O	Jongyoun Kim	
Phone	Phone +82-10-4709-3091		dafunk@scatterlab.co.kr			
Main Business Field		Conversational Al				
Main Product and Service		- Pingpong: Social Chat Al - Pingpong Builder: Social Chat builder for Conversational Al				
Investment history		\$6.5 million in accumulated investment from NCSOFT, SOFTBANK Ventures Asia and others.				



Seerslab

https://argear.io

Company Identity

Searslab is a company that implements visual intelligence Al using mobile phone cameras. Based on Tensorflow, a mobile deep learning framework, we are developing Al technology for various video analysis.

Tech & Service Info

Core Al	■Visu	■Visual Intelligence		nd Intelligence	☐ Language Intelligence
	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics
	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI
	□ AEI		□XAI		☐ Etc
Framework		Tensorflow		Data type &	Face landmark,
		rensomow		secure	Segmentation, etc.

Company's Core Al Explain

-Real time analysis of facial landmarks and facial beauty / cosmetic rendering, Real-time body area detection and body pose tracking, AR technology using body pose tracking information, 3D avatar face creation with one 2D image

Product and Service Overview

1) Beautification: Real-time face beautification by applying landmark shape adjustments. 2) 2D&3D AR Sticker: Use 2D image/animation stickers, filiters, 3D animation, face mask, 3D obejests, etc. 3) Segmentation: Real-time segregation and replacement of background. 4) 3D Avatar: Al-driven algorithms produce 3D avatars representing a real life person from a single photo.

Product and Service Image

2D&3D Sticker

Segmentation

3D Mask

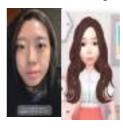
3D Reconstruction Engine

Body Pose Estimation











- 2019.11 ARGear Platform Commercial Service Launched (www.argear.io)
- 2019.04 KT 5G AR Service "Narle" Commercial Release
- 2018.10 Spark AR Partner on Facebook and Instagram
- 2017.08 Selected as global MCP for Samsung AR smartphone contents
- 2016.02 Series A investment from Y-Combinator, Foundation Capital
- 2015.05 Launched world's first AR camera app "Lollicam" application



	In the current project-based license and content business, we plan			
Business model	to switch to BM based on usage by a SaaS platform user base. We			
busiliess illouei	will also proceed to monetize through direct B2B sales and content			
	sales even if the SDK is initially distributed for free			
	The global AR / VR market is expected to grow to \$ 105 billion in			
Target market	2022 (Source: Digi-capital, 2018), with the mobile AR and smart			
	glasses market as target target markets of around \$ 90 billion.			
Customers	Samsung, LGU +, KT, Ebay, SK, Facebook, Instargram, etc.			
Future plan				

Future plan

Starting in 2020, we will push forward to take the lead, in the rapid growing AR platform market, by distributing our key technology, ARGearSDK base package for free. Additionally, we will provide the customized products and BM proposals for the major corporate clients who require differential AR technologies and contents through B2B business.

Name	Seerslab	Establishment	In 2014	C.E.O	Michael	Chong	
Phone +82 70-7702-6800		E-mail	seerslab@seerslab.com				
Main Business Field		AR Commerce, A	R H/W, AR ac	lvertiseme	nt		
		1. AR GEAR :W	/e provide va	rious lates	st AR techi	nology	as
		SDK through AR GEAR, our own core Engine.					
Main Prod	Main Product and Service		2. AR GEAR SaaS Platform : that is providing ARGear SDK,				
			and Console.	It's all-	in-one AR	Soluti	on
		Platform.					
Investment history		Attracted total Combinator, Kaka	investment ao Ventures, e	of \$ tc.	1,579,962	from	Υ



SEJINMIND Co. Ltd.

www.markiny.com

Company Identity

Intellectual property service technology company SEJINMIND using data and artificial intelligence technology, offers differentiated experience in acquiring and managing intellectual property rights and pursues innovation.

□ Tech & Service Info

Carra Al	☐ Visual Intelligence		☐ Sound Intelligence		■ Language Intelligence	
	■ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics	
Core Al	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI	
	□ AEI		□XAI		☐ Etc	
			Data type & Result		data of trademark trial	
Framewo	rk TensorFlow		(Korea Patent Information			
			secure	Service	ice)	

Company's Core Al Explain

The coordinate values are assigned to the disassembled texts. Using deep learning, the core technology is developed to judge the similarity of trademarks by judging the degree of similarity between images after.

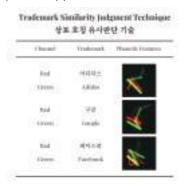
Product and Service Overview

- Markiny is a service that enables applicants to easily and intelligently process all the procedures from trademark application to registration
- High quality trademark application process by consulting online with trademark attorneys
- All process from application to registration is made transparent online
- Online Credit card payment possible



- 2017 AI based trademark similarity judgment technology, 3 patent applications and 1 PCT application
- 2019 Al-based patent classification technology, 1 patent application





Business model	Fee-for-service model				
Target market	- An estimated 10.9 million trademark applications were fled worldwide in 2018 (about 1.7 million more than in 2017, corresponding to growth of 19.2%) - In IP services, the introduction of technology has been relatively delayed, but with the recent ICT technology development and the AI, the convergence of the intellectual property industry and technology will be stimulated - Intellectual property service work will be automated and more efficient, and service quality and customer experience will be				
Customers	improved N/A				
Castomers	- · ·				

Future plan

- Establish company brand portfolio management platform
- Immediately identify the status of trademark applications filed in Korea and abroad
- Simplify data communication integration and data collection and reorganization

Name	SEJINMIND Co. Ltd.	Establishment	In 2017	C.E.O	Daeho Lee	
Phone	Phone +82 2-6745-0410 E-mail co		contact@sejinmind.com			
Main Business Field		Intellectual property service				
Main Product and Service Name		markiny				
Investment history		0 KRW				



Select Star Inc.

www.selectstar.ai

Company Identity

High-quality AI learning data created by mobile users, www.selectstar.ai AI training Data Services company Select Star produces training data quickly and accurately through 20,000 users of its global mobile app 'CashMission' and the entire data validation system.

Tech	ጼ	Service	Info
16611	CX	OCI VICE	IIIIU

Core Al	☐ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics	
	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI	
	□ AEI		☐ XAI		☐ Etc	
Framework	Self-developed	Da	ta type & secure	Self-d	collecting and Processing	

Company's Core Al Explain

Select Star performs the data collection/processing requested by the customer through 20,000 users of own mobile app 'CashMission' and validate all the collection/processing work to deliver high-quality training data. We covers all kinds of training data such as Image Collection, Classification, 2D Box Annotation, Instance Segmentation, Polyline & Key Point Annotation, Voice (recording, transcriptions, classification), Text (collection, OCR translation, classification).

Product and Service Overview

- -Efficient training data production with mobile crowdsourcing
- Ensure data accuracy and quality through total data validation
- Produce diverse data based on 20,000 global mobile users
- Acquiring 1.2M\$ in sales from 40 customers including Naver, LG CNS, Korea Electric Power Corp., Lotte Information & Communication Co. and KAIST

Product and Service Image



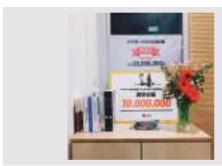
We developed our own mobile UI/UX for high accuracy, and also validate all data worked by two or more experienced inspectors to ensure quality.

In particular, by partnership agreement with the Philippine Reward App Pera Sweep of 2 million users, we can quickly produces data from various users.

Select Star focuses on upgrading our own application CashMission and on creating a service platform for easier requesting of collection and processing missions.

- > 2018 E5 kaist competition winner.
- > March 2019 Korea Mobile Awards winner.
- > 2019 participation for the project of deploying artificial intelligence of educational data (Korea Information Society Agency and national projects).
- > 2019, kakao Ventures seed investment 0.4million\$.
- > total sales of 1.2million\$ provided by customers including Naver, Korea Electric Power Corp., Lotte Data Communication, LG cns .





Design of the second of	Selectstar has a business model that acts as an agent for data production				
Business model by Al companies and receives platform fees.					
	Annual growth rate of global AI markets is 56% and 112 trillion KRW				
	(2018, IDC) in 2022.				
Target market	- Mighty AI, established in 2014, has accumulated 30 million \$ in				
	investments.				
	- Scale, established in 2016 has accumulated 25 million \$ in investment.				
	Naver (Korea) Software & Artificial Intelligence				
	LG CNS (Korea) Software & Artificial Intelligence				
Customers	Korea Electric Power Corp KAIST AI Research Center (Korea) Software &				
	Artificial Intelligence				
Lotte Information Communication (Korea) Software & Artificial Intelligence					
	Future plan				

- -Improve our own crowd-sourcing app 'Cashmission'
- -Select Star set up and manage all data production projects -> Customer upload data collection/labeling projects freely (crowsing web platform).
- 100,000 domestic users and 5,000 daily participants

Select Star Inc.	Establishment	In 2018	C.E.O	Howook Shin		
+82 10-3081-3046	E-mail contact@selectstar.ai					
Main Business Field		Al training data collection and labeling				
duct and Service	CashMission(mobile crowd sourcing application)					
Investment history		0.4M\$(kakao ventures, 2019)				
	+82 10-3081-3046 ness Field duct and Service	+82 10-3081-3046 E-mail ness Field Al training data duct and Service CashMission(mo	+82 10-3081-3046	+82 10-3081-3046		



Semicon Networks Co., LTD

www.sns..co.kr

Company Identity

Rather than replacing human's job, our focus is to improve human work quality. With Archivist Workstation 2.0, of which key function is document classification, Archivist in every government office can reduce workload almost 10k times. In addition to this Text based Al solution, we have human voice, face and pupil tracking based Emotion analysis technologies, which were deployed on PePeRoNe Browser and PePeRoNe Robot.

☐ Tech & Service Info

	■ Visual Intelligence		Sound Intelligence		■ Language Intelligence	
Core Al	■ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
Core Ai	Reinforcement learning			☐ Autonomous driving		☐ AGI
	■ AEI		☐ XAI		☐ Etc	
Framework	UbuntuPostgreSQLTensorFlowPython	Dat	a type & secure		Voice Pup Kor	nan Face: 1.4M ce: 1.4M il: 5.6M ean corpus db in ernment documents: 0.7M

Company's Core Al Explain

- 1. PentaGram based TF/IDF algorithm: For searching similar type documents to build training data quickly Applied to Archivist Workstation 2.0
- 2. AIMDVF(AI based Mood Detection thru Voice and Face): Human emotion detection and analysis with ensemble logic Applied to PePeRoNe Browser and PePeRoNe Robot.
- 3. Sound Beaming: For finding speakers voice direction Applied to PePeRoNe Robot
- 4. Eye Contact: For capturing human face expression Applied to PePeRoNe Robot.
- 5. Gaze Tracking: For capturing human pupil status Applied to PePeRoNe Robot

Product and Service Overview

- 1. Archivist Workstation 2.0 : To help and reduce Archivists workloads who are responsible for RMS(National Records Management System) in document classification.
- 2. PePeRoNe Browser: Integrated with Google Chrome to analyse in real time how users are responding to searching results, advertisement, etc.
- 3. PePeRoNe Robot: Raspberry Pi based Robot. Understands human emotion thru voice, face and pupil so that the Robot can increase intimacy and talk in more life like style in conversation.

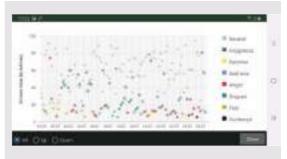
Product and Service Image

Archivist Workstation 2.0



With PePeRoNe Browser, Users response can be analyzed in real time mode on how people are responding to certain contents or advertisements or youtube. And PePeRoNe Robot can understand speaker's voice direction with Sound Beaming technology and speakers emotion status with Eye Contact and Gaze Tracking technology so that Robot can exchange more life like conversation with human.







- 1. PePeRoNe Browser
- 2. PePeRoNe Robot (Demo)
 - https://youtu.be/F-tsnl0Zu9E
- 3. Archivist Workstation 2.0

Business model	B2B, IP License, Appliance with h/w and integration service		
Target market	Archivist Workstation 2.0: Local Government office, \$35M		
rarget market	AIMDVF: Robot makers, AD company, Oracle, IBM and MicroSoft		
Customers	1. Archivist Workstation 2.0: 700 government offices in local		
Customers	2. AIMDVF: \$10M for both local and overseas market		
Futuro plan			

Future plan

- 1. Archivist Workstation 2.0: Al seminar for Archivists about what Al can really help reduce their workload.
- 2. AIMDVF: Sales Agency finding and contract for target countries

Name	Semicon Networks Co., LTD	Establishment	In 1994	C.E.O	KL Hong
Phone +82-2-561-7080		E-mail	dwbaek@sns.co.kr		
Main Business Field		Implementation of RMS for Local Government records management system			
Main Product and Service		Archivist Workstation 2.0, PePeRoNe Browse and Robot			oNe Browser
Investment history		Self funded marketing fund		May red	quired some



SI Analytics

www.si-analytics.ai

Company Identity

SI Analytics (SIA), a subsidiary company from Satrec Initiative, is a new startup providing artificial intelligence-based geospatial analytics on satellite/aerial imagery. With the cutting-edge deep analytics, SIA is helping customer analyze vast amount of imagery and collect unprecedented intelligence.

☐ Tech & Service Info

	Vis	ual Intelligence	☐ Sound Intelligence	☐ Language Intelligence
Core Al	■ Data Driven / Modeling		■ Data Processing	☐ Hardware / Robotics
Core Ai	☐ Reinforcement learning		☐ Autonomous driving	☐ AGI
	☐ AEI		■XAI	☐ Etc
Framewo	rk	TensorFlow, PyTorc	ch Data type & secure	Satellite/Aerial Image

Company's Core Al Explain

<World Top Class AI Experts for Satellite Imagery Analytics>

We have consistently verified our AI expertise through the international competition. and made continuous efforts to solve the major problems needed for satellite and aerial imagery analysis, and the results show the excellent competitiveness of our products

Product and Service Overview

- Human-Machine Collaboration: Massive Automatic Analysis with Human Feedback
- Dataset Design and Annotation: User-defined hierarchy and Exporting Trainable format.
- Optimized for Satellite Imagery: Optimized Processing for GeoTIFF Image

Product and Service Image



<Satellite imagery analysis service and Tool for dataset design and labeling>

- 2019.07.11. K-DARPA New Project Competition (DAPA)
- 2018.08.20. Object Detection in Aerial Images 2nd Place (ICPR)





Business model	Satellite Imagery Analytics Solution and Platform Building and Sales				
Target market	Value-addded Service market on Military domain (Annual \$530M)				
Customers	Pers Domestic/Intl. Defense and GEOINT market				

Future plan

- Launch "Platform for Explainable AI based Satellite Imagery Analytics"
- Provide analytics Platform and Solutions for Defense and GEOINT customer
- Provide analytics service for satellite imagery analytics using cloud

Name	SI Analytics	Establishment	In 2018	C.E.O	Taegyun Jeon, Sungdong Park
Phone	+82-42-330-6800	E-mail contact@si-analytics.ai		ai	
Main Business Field		Satellite imagery analytics solution and platform provider			
Main Product and Service		LabelEarth (Image Labeling), Analytics Platform			
Investment history		N/A			

SimSimi

SimSimi Inc.

simsimi.kr

Company Identity

We provide open-domain/emotional conversations for Al chatbots or socialbots. In 2002, we developed Al 'SimSimi' that can communicate like a friend and has been serving for 17 years. To date, SimSimi has accumulated more than 130 million conversation scenarios, with twenty-two million panels lightly 'taught' with their own wit and inspiration, and have become friends of each of the 350 million users worldwide. SimSimi, who stayed in subculture with the help of deep learning, is becoming a mainstream.

☐ Tech & Service Info

Carra Al	☐ Visual Intelligence ☐ :		Sound Intelligence	■ Language Intelligence	
	☐ Data Driven / Modeling	Data Driven / Modeling		☐ Hardware / Robotics	
Core Al	☐ Reinforcement learning		Autonomous driving	■ AGI	
	■ AEI □ XAI		XAI	☐ Etc	
F	AICR Engine, DSC, HB10		Data to 0	conversation scenarios	
Framework	(Self-developed)		Data type & secure	(Self-collection)	

Company's Core Al Explain

- Open-domain/emotional conversation engine for chatbot $\overline{\text{that makes 'Al as a friend' beyond 'Al as an assistant'(AlCR Engine)}$
- Deep learning sentence classification solution covering more than 81 languages(DSC)
- Data Annotation Platform for Deep Learning Sentence Classification(HB10)

Product and Service Overview

[AICR Engine]

- A conversation processing engine that provides open-domain/emotional conversations of AI
- Provide appropriate response sentences based on more than 130 million scenarios in 81 languages written by over 22 million panels

[DSC (Deep Sentence Classifier)]

- Language-independent deep learning sentence classification model(CNN)
- Proven performance by applying SimSimi service [HB10]
- Data Annotation platform for deep learning sentence classification
- Each piece of data is labeled with 10 trusted votes

Product and Service Image



AICR Engine (Dialog Processing Engine), Sentence Classification Deep Learning Model (DSC), HB10 (Data Annotation Platform for Deep Learning Sentence Classification)

Over 130 million conversation scenarios in 81 languages written by more than 22 million panels

- 2004, started SMS conversation service with domestic telecommunications company and achieved more than 300,000 monthly paid subscribers
- Internationalization since 2010, ranking 1st in 71 countries around the world (App Store/Google Play)
- Conversations with 350 million users in 81 languages, handling up to 200 million conversations per day
- More than 32,000 developers worldwide use the AICR Engine API
- Enhance the possibility of expanding the user base with the success of deep learning sentence classification



Business model	In-App Ads, Paid subscription, AICR Engine supply(B2B)				
	- Any situation where conversation can help (stress, depression,				
Target market	loneliness, boredom, emotional disorders, neuropsychiatric problems)				
	- Free talking curriculum for foreign language training				
	- More than 350 million cumulative users in 81 languages				
Customers	worldwide				
- About 32,000 developers using AICR Engine					
Future plan					

Leverage voice interface and engage in areas where conversations can be helpful

Name	SimSimi Inc.	Establishment	In 2003	C.E.O	Junghoi Choi	
Phone	+82 2-562-5332	E-mail	support@simsi	mi.com		
Main Business Field		- Open-domain/emotional conversation - Al chatbot SimSimi (Mobile App/Web)				
Main Product and Service		- SimSimi - AICR Engine - DSC - HB10				
Investment history		N/A				

S	Skelter	Labs
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Skelter Labs

www.skelterlabs.com

Company I	de	ntity
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Skelter Labs is a strong engineering driven AI technology company focusing on developing core technologies in Conversation and Hyper-personalization. As a technology provider, Skelter Labs' priority is to create value for businesses by making existing solutions work better with applicable AI.

Tech & Service Info

Coro Al	☐ Visual Intelligence	■ Sound Intelligence	■ Language Intelligence	
	■ Data Driven / Modeling	☐ Data Processing	☐ Hardware / Robotics	
Core Al	■ Reinforcement learning	☐ Autonomous driving	□ AGI	
	□ AEI	□XAI	☐ Etc	
Framewor	k Not public	Data type & secure	Not public	

Company's Core Al Explain

1. Conversation

a. NLU (Natural Language Understanding)

Enabling best-in-class virtual interactions between end-users and enterprises, Skelter Labs' NLU technology includes three key components intent classification, entity recognition and dialog modeling.

b. Speech

Based on understanding the complexities of human language, Skelter Labs develops highly advanced technologies for converting audio and voice into written text (ASR) as well as converting written text into natural-sounding audio and voices (TTS).

2. Hyper-personalization

Skelter Labs' hyper-personalization technology delivers a new dimension of consumer insights. Our technology recognizes an entire class of entities and activities from various mobile signals to build inference modeling based on the user context and behavior patterns. By creating in-depth user profiles and continuously increasing its accuracy through the Al-based inference model, we bring a new breed of marketing and ad technology to the market that enables true innovation in personalizing the consumer experience.

Product and Service Overview

AIQ.TALK

- AIQ.TALK Chatbot: Chatbot builder Engine
- AIQ.TALK TTS / AIQ.TALK STT (Expected to be launched in late 2019): TTS & STT Engine AIQ.AWARE
- AIQ.AWARE mobile SDK: Providing real-world activity data and user profile data for Hyper-personalization marketing
- AIQ.AWARE Studio (Expected to be launched in early 2020): Hyper-personalization marketing solution tool with real-world customer insight dashboard

Product and Service Image

See Homepage

- JoongAng Ilbo's Korea Economy Leader Awards 2018 Winner in Innovation category
- Money Today's Korea's Most Innovative Tech Company 2017 Winner in Al category









	Joint business or project with partners from each industry vertical based on		
Business model	Al technology. Independent business is available depending on the types of		
	technologies and products.		
	- Conversation: contact center, customer service, on-device electronics,		
Target market	education, finance and many more - Hyper-personalization: Shopping, travel,		
	food, membership, game, finance and many more		
Customers	Not public		
Future plan			

- Conversation: Achieve the highest performance in Korean both for NLU and Speech, while become global top-tier in overseas
- Hyper-personalization: Expand business innovation in marketing and ad industry through Hyper-personalization approach by continuous advancing Al-based inference model

Name	Skelter Labs	Establishment	In 2015 C.E.O		Ted Wongyu Cho	
Phone	+82-2-2038-0112	E-mail	contact@skelterlabs.com			
Main Business Field Conversation (Nonfline context in			NLU, Speech), Hyper-personalization (online and recognition, user modeling)			
Main Prod	duct and Service	AIQ.TALK (Conversation Engine), AIQ.AWARE (Hyper-personalization engine)				
Investmen	t history	\$10 million (Kak Stonebridge Ven Ventures)	ao Brain-Kaka tures, Lotte	ao Venture Homesho	es Consortium, pping, Golden Gate	



SOLIDWARE

https://solidware.io

Company Identity

Solidware is a leading provider of big data and Al-based data analysis solutions with top tier talents gathered from all around the globe including the U.S, Russia, Canada, France, Japan and Korea. Solidware's DAVinCl LABS is a practical solution created with the purpose of popularizing future technology, and the machine learning technology that is handled by the minority of technical experts can now be easily used by anyone with just a click of the mouse.

Tech & Service I	Into
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Core Al	■ Visual Intelligence	☐ Sound Intelligence	☐ Language Intelligence		
	■ Data Driven / Modeling	■ Data Processing	☐ Hardware / Robotics		
Core Ai	☐ Reinforcement learning	☐ Autonomous driving	☐ AGI		
	☐ AEI	■ XAI	☐ Etc		
Framework	spark, keras, scipy	Data type & secure	standard& non-standard data (customer)		

Company's Core Al Explain

- 1) Automatic data pre-processing:
- Automatically convert general data into machine learning applicable data
- Provide robust smart data processing for various missing/extreme and duplicate values
- 2) Modeling (Automatic selection of optimum algorithm):
- Optimal parameter settings for various Al-based algorithms
- Linear combination of various algorithms such as Deep Learning, Ridge Regression, GBM, Random Forest to maximize predictive power and automatically generate optimal clusters

- 3) Intuitive Visualization (intuitive analysis result display):
- In-house developed intuitive UI/UX
- No coding necessary by the user
- 4) Reporting (comparative analysis between results of various algorithms):
- Numerous comparative analysis of various model related to data and projects through reporting
- Capable of exporting the analysis result in preferred format by user
- Extracting predictive function based on machine learning into a form that can be applied to operating systems such as JAVA and C

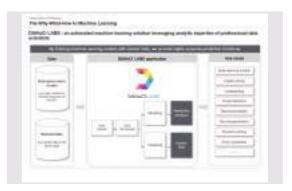
Product and Service Overview

- Self-developed automated machine learning solution, DAVinCI LABS is designed to enable anyone to achieve high performance data analysis through just few clicks.
- Can be applied to any industry with big data such as financial, distribution, manufacturing industry.
- Current main customers are financial institutions such as banks, insurance and has exported solution to Thailand, Vietnam, Malaysia and Japan
- Automated all of data scientist's tasks such as data uploading-cleansing-preprocessing-algorithm screening- hyper parameter tuning- predictive function download
- Automatically generate optimal models based on data characteristics by utilizing all commonly used algorithms such as deep learning/ neural net/ regression and decision-making models.
- Java/C based prediction function can be downloaded easily with a single click and reflected on other operating systems.

Product and Service Image

See Business Info





	- License business of automated machine learning solution [DAVinCl Labs]		
Business model	- Al transformation consulting service [Quick-win Consultancy]		
	- Machine learning training service [DAVinCl School]		
	-As of October 2019, we have track records focused on the financial sector		
Taxast masulast	in East Asia (Korea, Japan, Southeast Asia, etc.).		
Target market	-Since 2020, focus on securing multi-national references in all industries		
	including distribution, manufacturing, and logistics		
	Shinhan Bank(Korea)		
	Shinhan Life Insurance(Korea)		
	Dongbu Insurance(Korea)		
	BNK Financial Group(Korea)		
	Hyundai Mobis(Korea)		
Customers	SONY Assurance(Japan)		
	Mitsubishi Coporation(Japan)		
	ACS Servicing(Thailand)		
	TP Bank(Vietnam)		
	AEON Bank(Malaysia) and many others		
Future plan			

- Launch the world's first full machine learning package solution (comprehensive training including supervised-unsupervised-semi-supervised training)
- Expand global business via strengthening local presence
- Diversify business sectors and secure reference in areas such as manufacturing, distribution, logistics, advertising and etc...
- Expand AI transformation consultancy service to mid-size companies.

Name	Solidware Co. , Ltd	Establishment		In 2014	C.E.O	PARK JAYHYUN
Phone	+82 2-6105-6391	E-mail contact@solidware.io				
Main Busi	iness Field	Automated Machine Learning				
Main Prod	duct and Service	DAVinCI LABS				
Investment history		N/A				



SOLUGATE

http://www.solugate.com

Company Identity

"A world where you can make what you want with your words!"

Our vision is to redefine the customer service experience of the future through Al enabled Conversational Service Automation. Because in the era of the next step in Human-Machine Interaction Voice will be the new UI.

□ Tech & Service Info

	☐ Visual Intelligence	■ Sound Intelligence	■ Language Intelligence		
	☐ Data Driven / Modeling	■ Data Processing	☐ Hardware / Robotics		
Core Al	■ Reinforcement learning	■ Reinforcement learning		☐ AGI	
	■ AEI	□XAI	☐ Etc		
Framewor	TensorFlow, Elastic	Data type & secure	Self Securing		

Company's Core Al Explain

Chat-bot is an artificial intelligence (Al) -based communications software that provides answers to questions and various related information through text conversation with people. It will help you find the services and data you need in a timely manner and improve your work efficiency.

Product and Service Overview

Scenario-based solution

The chat-bot solution identifies your question by providing a scenario-based configuration of each conversation so that people and artificial intelligence can communicate with each other. It can be applied when the question and answer data is clearly structured. And The solution is also easy to develop through the scenario editor.

Knowledge-based solution

The knowledge-based chat-bot solution analyzes the user's intents by providing a set of scenario and question answers. This solution extends the user's query and applies an algorithm to determine the best answer. It also adds context management and cognitive capabilities to user queries to provide more accurate answers.

Product and Service Image



We have developed original technologies such as voice processing, natural language processing, and knowledge processing, which are the core of intelligent contact centers, and have already registered as patents. Through continuous R&D of the Solugate Research Center, we are contributing to the construction of a next-generation intelligent contact center.









Business model	License
Target market	20 billions, Intelligent contact center
Customers	KB Securities, HANA Life, National Tax Service, etc

Future plan

Key features for intelligent contact center system configuration. Solugate has core technologies of voice processing, natural language processing, and knowledge processing to build an intelligent contact center system. We will work with our customers to transform their existing contact centers into intelligent contact centers.

Name SOLUGATE Inc.		Establishment	In 2014 C.E.O D		David Min
Phone	+82-70-8882-5252	E-mail	park1058@solugate.com		
Main Business Field Voice recognition, Chat-Bot					
		Intelligent contact center, Voice recognition Solution,			
Main Product and Service		Knowledge-Based Voice Print Certification System,			
		Chat-Bot Solution, Text Analysis Solution			
Investmen	nt history	4.3 billion won			



SOYNET Co., Ltd

www.soynet.io

Company Identity

SoyNet is an AI inference accelerator that help your AI inference model to run faster and better. It is 3 times faster with 1/9 of memory consumption compared to Google TensorFlow.

□ Tech & Service Info

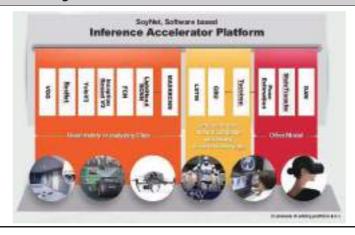
Caro Al	Vis	sual Intelligence	☐ Sound Intelligence	■ Language Intelligence		
	☐ Data Driven / Modeling		☐ Data Processing	☐ Hardware / Robotics		
Core Al	☐ Reinforcement learning	☐ Autonomous driving	☐ AGI			
	□ AEI		□XAI	■ Etc, Al Accelerator		
Framewo	rk	SoyNet 2.0	Data type & secure	Collect from customer		

Company's Core Al Explain

SoyNet is a software based inference only framework without learning engine. With this, SoyNet run inference model with 1/9 of memory consumption compared to Google TensorFlow. At the same time, SoyNet execute AI operators in parallel unlike usual AI frameworks single processing so that SoyNet run 3 times faster compared to Google TensorFlow.

Product and Service Overview

SoyNet is a software based inference only framework that run pre-trained AI model 3 times faster with 1/9 of memory compared to Google TensorFlow.



- 2019.10 2019 Robo World Best Product Award

- 2019.10 China Guilin Innovation and Entrepreneurs Award

- 2019.05 D.CAMP Award

- 2019.04 SeongNam S-StartUp Grand Award









Business model	License and Consulting		
Target market	Al Inference Accelerator / \$2 B		
Customers	Po***, Neuromeka, Pin***, Mob***, and others		
Future plan			

SOYNET will provide affordable deep learning solutions based on Cloud and IoT that SoyNet is embedded on

Name	SOYNET Co., Ltd	Establishment	In 2018	C.E.O	YH Kim/JW Park	
Phone	+82 70-4164-8951	E-mail jungpark@soynet.io				
Main Business Field		Al inference accelerator(Speed/Memory Optimization)				
Main Product and Service		SoyNet 2.0				
Investment history		ENSL Partners				



SPINAWEB Inc.

www.spinaweb.co.kr

	Com	pany	Ider	ntity
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SpinAweb is a deep learning-based computing vision R&D company.

Through face recognition, access control, emotion recognition, and face masking technology were developed. We are developing Al video recognition solution to proactively respond to fire and disaster accidents using CCTV video.

Г	_ T	och	Ω.	Cor	vico	Info
		ecn	CΧ	Ser	vice	IIIIO

	■ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
Coro Al	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics	
Core Al	☐ Reinforcement learning		☐ Autonomous driving		■AGI	
	■ AEI			□XAI		☐ Etc
Framework tensor flow		Г	Data type & secure Vid		deo and image files (self)	
Framework tensor now Data		data type & secure	VIC	ieo and image mes (sem)		

Company's Core Al Explain

Face recognition - We have developed a solution to manage children's access to private institutes through multiple facial recognition technology and to recognize and communicate their feelings through facial analysis.

Fire Detection - Multi-model detection technology using four algorithms is being developed for fire and smoke detection. This is to improve the accuracy and speed of detection.

Product and Service Overview

SpinF - Control management solution through face recognition technology

SpinE - Emotional recognition module through facial analysis technology

SpinF&S - Deep Learning based Fire & smoke detection module using CCTV video



- 2019.04.19. selected KODIT Start-up Nest company
- 2019.07.02 selected KDATA AI data voucher support project company



Business model	Face recognition - HW combination self-service / emotional		
business model	recognition - license module service / fire detection - SaaS		
	The domestic market for face recognition in the security market is		
	expected to reach 150 billion won by 2020 (Korea Institute of		
Target market	Science and Technology Information) / Global market size for		
	emotional recognition is expected to be \$20 billion in 2021		
	(Kenneth Research)		
	Face and Emotional Recognition - Academy, Education Company,		
Customers	Theme Park		
	Fire Detection - Local Government, Government Office, Security		
	Company		

Future plan

Face recognition - to be used as an access control system for private institutes and sports centers

Emotional awareness – products to be available for interactive communication on training robots and training tablets

Fire Detection – Selling solutions through technology enhancements

Name	SPINAWEB Inc.	Establishment	In 2017	C.E.O	JONG HYL	IN LEE
Phone	+82 2-6406-1990	E-mail	spinawebai@gn	nail.com		_
Main Business Field		face recogniti smoke detectir	on, emotion r ng	ecognitio	n and fire	e and
Main Prod	Main Product and Service		s control solutio otional recognit inF&S - Deep ng module	n throug ion mod learning	h face reco Iule throug based fir	gnition h face e and
Investment history		N/A				



SpringCloud Inc.

www.aspringcloud.com

☐ Company Identity

Leading company for AI based integration auto-driving mobility service and operation

☐ Tech & Service Info

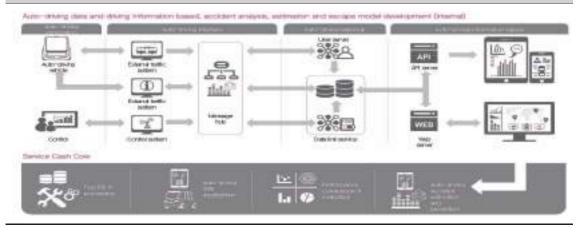
	☐ Visual Intelligence		☐ Sound Intelligence	☐ Language Intelligence
Core Al	☐ Data Driven / Modeling		☐ Data Processing	☐ Hardware / Robotics
Core Ai	☐ Reinforcement learning ☐ AEI		■ Autonomous driving	□ AGI
			□XAI	☐ Etc
Framework		Spring go	Data type & secure	image, driving

Company's Core Al Explain

Auto-driving key Al automatic scenario development, recognition, decision, control and positioning technology development

Product and Service Overview

Korea's only Auto-driving Mobility operation service (Authentication, license, permit holding)



- 2018.01.00 President Moon Jae-in attending auto-driving round-table conference
- 2018.03.00 Collaboration with K Global 300 selected company Navya
- 2018.05.00 Participated in the Giga Korea auto-driving project (KT)
- 2019.06.00 K-Global, Startup Selection (NIPA) 14:1 Competition Rate









Business model	Auto-driving mobility operation service, auto-driving data hub and
business model	analysis service, Al unmanned auto-driving ECOservice
Target market	Market size (BCG, 2015) is expected to be \$42 billion (15% level) in
	2025 and \$77 billion (25% level) in 2035. Sales of auto-driving
	vehicles in 2030 are expected to reach 100 million units (Hyundai
	Economic Research Institute, 2018)
Customers	Daegu Metropolitan City(Korea), Sejong Metropolitan Autonomous
	City(Korea), Navya(France)

Future plan

Secure core business model based on "Vehicle, communication, operation, data management and integrated cognitive technology" for full Auto-driving Mobility based passenger, transportation and delivery service business

Name	SpringCloud Inc.	Establishment	In 2017	C.E.O	Song Younggi	
Phone	+82 31-778-8328	E-mail	whchoi@aspringcloud.com		com	
Main Business Field		Auto-driving mobility operation service				
Main Product and Service		Tasio				
Investmen	t history	2 billion won (mando, infoba	nk, etc)		

SRUNIVERSE

SRuniverse. Inc

www.sruniverse.kr

☐ Company Identity

SRuniverse uses AI technology to realize individual voices, appearances and behavior patterns. We present freedom and abundance to humankind through the implementation and use of virtual identity.

□ Tech & Service Info

	☐ Visual Intelligence	Sound Intelligence	■ Language Intelligence
☐ Data Driven / Modeling		☐ Data Processing	☐ Hardware / Robotics
Core Al	☐ Reinforcement learning	☐ Autonomous driving	■ AGI
	■ AEI	□XAI	☐ Etc
Framework	Pytorch, Tensorflow	Data type & secure Self	recording / Self-image

Company's Core Al Explain

- > Deep learning technology to determine the facial expression and expression of the subject to produce a virtual face
- > Virtual Voice is a multi-player synthesis technology that learns deep learning by collecting data from multiple people at the same time.
- > Create a Vurtual Voice voice of a real person who speaks in a desired voice in about 30 minutes
- > VI Broadcasting is a new concept broadcasting system that enables immediate broadcasting through text sound source.
- > Realize features such as virtual identity, individual voice, appearance, behavior pattern, and conversation
- > Produces creative contents of various authors, from reading content to publishers with VF

Product and Service Overview

Al Broadcasting(VI Broadcasting)



- 2019.05.25 2019 KOBA Exhibition KBSLabs-Al Voice based Disaster / Broadcasting System Demonstration





Business model	Broadcasting Contents	
Target market	N/A	
Customers	N/A	
Future plan		

- Development of varioius Al media contents including the Virtual Voice and the Virtual Face platforms

Name	SRuniverse. Inc	Establishment	shment In 2014 C.E.O JEEWOO			
Phone +82 70-8806-1022		E-mail	roma.kim@sruniverse.kr			
Main Business Field		Deep learning VV, VF				
Main Prod	duct and Service	I Broadcasting(VI Broadcasting)				
Investmen	nt history	to be invested				



Starcell Inc

www.starcell.co.kr

Company Identity

Al Server Platform and Al Education Kit Provider

□ Tech & Service Info

	Core Al	■ Visual Intelligence		☐ Sound Intelligence		□ L	☐ Language Intelligence	
		☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics		
		☐ Reinforcement learning		☐ Autonomous driving			☐ AGI	
		□ AEI		□XAI			Etc	
	Framewor	·lz	Tensorflow, Keras,		ntel Data time % cocur		Kaggle, ai open	
	riailiewoi	K	Nauta, Caffe, Horov	Data type & secure		е	inovation hub, etc	

Company's Core Al Explain

Starcell specializes in providing server platforms for Al and dedicated Al education kits. We develop and supply server clusters based on container technology, education-specific kits and contents, which are essential for Al research and development and education.

Product and Service Overview

Deepcell CCRS(Container Cluster Ready System)

- 1) Optimum H/W
 - Includes all major systems such as servers, storage, and networks
 - Reliable and optimized hardware system configuration
 - Optionally configured according to customer needs
- 2) S/W Installed
 - Docker, Kubernetes and other plug-in softwares are Preinstalled
 - Persistent volumes and volume claims are preconfigured and ready to use
- 3) Training and Support Services
 - Technical support service on containerizing for initial deployment
 - Provide training for customers who are not familiar with containers and container clusters

Product and Service Image

Deepcell AI EDU

- ➤ Al hands-on training package for everyone, even those without prior knowledge
- Provide H/W, S/W, and educational contents and services for education
- Hands-on training that includes the entire Al course from data acquisition to inference applications
- Exciting hands-on exercises and missions with drones
- > Training system is provided of virtualized Docker Image for easy management of lab environment

- 2019.07.20 UNIST AI Drone Education



Business model	Selling Deepcell solutions to AI R & D Organizations and
	educational institutions
Target market	R & D, Education, Government/above 50 billion Won
Customons	Inje University, Wonkwang University, Korea Research Institute of
Customers	Chemical Technology

Future plan

Providing efficient, distributed server clusters for large-scale deep learning. Providing architecture consulting for building the entire AI systems that include from data acquisition and preprocessing to application service.

Name	Starcell Inc.	Establishment	In 2004 C.E.O		Nohun Park		
Phone	+82 2-540-0880	E-mail	npark@starcell.co.l	<r></r>			
Main Busi	iness Field	Server for AI, Ed	Server for AI, Education				
Main Prod	duct and Service	installed on v Deepcell EDU Kit Total Edu Kit	onrainer Cluster Re. Al server platform irtualization contair : : for who wants Al software, and ed	ner (Dock Hands-c	er) ons, including		
Investmen	nt history	none					



Story & Brothers Co. Ltd.

sapiensteam.com

Company Identity

When you do your projects or make your startup and you look for team members who have experiences, know how, and knowledges, the Sapience Team Platform finds the right team members for you using AI Personality analysis data based on natural language analysis.

☐ Tech & Service Info

	☐ Visual Intelligence			☐ Sound Intelligence		■ Language Intelligence	
Core Al	☐ Data Driven / Modeling			☐ Data Processing		☐ Hardware / Robotics	
Core Ai	☐ Reinforcement learning			☐ Autonomous driving		□ AGI	
-		■ AEI		□XAI		☐ Etc	
				User's		s SNS Posts and Texts,	
Framework		Tensor Flow	Data	Data type & secure		y Data, User's Chatting	
					and Post on sites		
Company's Core Al Explain							

Analyze Personality and preference from Emotional analysis and Natural Language analysis about Texts.

Product and Service Overview

Based on expert network, Sapiensteam is a platform that allows users to prepare for start-up or create projects through team building using chatting between users and artificial intelligence propensity analysis matching technology.



- 2019.06.03 Bright Club, a leading start-up company in Busan
- 2019.06.03 Platinum Club, a leading start-up company in Busan
- 2017.11.23 Venture certification









Business model	Open Innovation and Open Contest, Group ware			
Target market	Experts 150,000, Common USer 800,000 in 2020			
Customers	Government Organization and Small and Middle Companies, All industries			

Future plan

Personality Analysis Upgrade, Use AI service to Education and marketing area, Experts Q&A service launching.

Name	Story & Brothers Co. Ltd.	Establishment In 2016 C.E.O Bo		Bo Hoon Kim	
Phone	+82 70-4228-8737	E-mail	sapiens.snb@gmail.com		
Main Bus	iness Field	Matching Platform / Team Building / HR / Al Natural Language Analysis			
Main Pro	duct and Service	SAPIENSTEAM			
Investmen	nt history	400,000,000 won (Cooledge Corner Investment, '17)			

Superb Al, Inc.

ww.superb-ai.com

Company Identity

Superb AI, Inc., established in April 2018, provides a new generation machine learning data platform. Superb AI launched 'Superb AI Suite', an enterprise software-as-a-service (SaaS) platform built to manipulate, manage and understand machine learning datasets and to accelerate advanced AI application on the fourth quarter of 2019. By relieving the burden of AI data preparation and management, Superb AI helps global machine learning companies around the globe expedite AI development and unlock their growth. Superb AI is backed by Y Combinator W19, Duke University, Pegasus Tech Ventures, Murex Partners and KT Investment, among others.

Tech & Service Info

	Core Al Explain	Data type & secure	Language Data: Voice, Text
Framewor	Tensorflow, Pytorch	Data type & secure	Visual Data: Image, Video
	□ AEI	■ XAI	□ Etc
Core Al	☐ Reinforcement learning	☐ Autonomous driving	□ AGI
	☐ Data Driven / Modeling	■ Data Processing	☐ Hardware / Robotics
	■ Visual Intelligence	☐ Sound Intelligence	☐ Language Intelligence

Company's Core Ai Explain

- Computer Vision and Natural Language Processing Al: Image, Video, and Text recognition tools
- Semi-automatic data production (processing, labeling) Al: Smart Data annotation tools
- Quality Control Al: Data annotation result & accuracy measurement tools for quality check
- Data Analytics Al: Data analysis and data explororation & discovery tools for the data intelligence
- Deep Learning-based data workflow: Active Learning, Data Anonymization technology, etc.

Product and Service Overview

Superb Al Suite is a cloud-based enterprise SaaS platform where Machine Learning engineers and researchers manipulate, manage and understand Machine Learning datasets, and Data Labeling teams create custom projects and collaborate with hundreds of collaborators.





- 2018.12.06 CEO Hyun Kim, Al Summit Korea 2018 'Korea's Rising Startup' Presentation
- 2019.01.03 Superb Al, A member of Y Combinator W19
- 2019.03.22 CEO Hyun Kim, Y Combinator Demoday
- 2019.10.29 International Conference on Computer Vision, ICCV 2019 Sponsor &

Demo









Business model	Enterprise SaaS			
Target market	Domestic and International ICT Enterprise, Research Lab and			
Target market	Institution			
	Samsung Electronics, LG Electronics, Kakao, Qualcomm, Phantom Al,			
Customers	Niantic, TEMASEK, Agency for Defence Development, Brown			
	University, Duke University, etc.			
Futuro plan				

Future plan

Superb AI R&D Center, located in Seoul, is researching and developing AI-assisted annotation tool and data processing technology which plans to support data types including video and text in addition to image data. Superb AI counts 30+ leading machine learning companies as customers including Samsung Electronics, LG Electronics, Kakao, Qualcomm, and NIANTIC, and aims to grow as a global partner for AI enterprise by expanding its partner network internationally.

Name	Superb Al, Inc.	Establishment	In 2018	C.E.O	Hyun Kim
Phone	+82 2-6956-0423	E-mail hello@superb-ai.com			
Main Business Field		Enterprise Machine Learning Data Platform Software, Data Labelling and Collection Service			
Main Pro	duct and Service	Superb Al Suite, Data Collection & Labelling Service			
Investmen	nt history	2M Seed Rour	nd Raised		



Sysmetic

moya.ai

Company Identity

On-demand news subscription service based on a natural language processing engine; our Al reads, analyses, summarises every article you need, in real-time.

☐ Tech & Service Info

	☐ Visual Intelligence		☐ Sound Intelligence	■ Language Intelligence	
Coro Al	☐ Data Driven / Modeling		■ Data Processing	☐ Hardware / Robotics	
Core Al	☐ Reinforcement learning		☐ Autonomous driving	☐ AGI	
	■ AEI		□XAI	☐ Etc	
Framework Tensorflow		Tensorflow	Data type & secure	text files(self)	
Company's Core Al Explain					

Text classification using cnn

Product and Service Overview

News Big Data Analysis Services Based on Natural Language Processing Engines. Provides a variety of user convenience features including text summary, sentimental analysis, and real-time detection.



- Hankyung FinTech Awards
- Korea Press Promotion Foundation has selected outstanding media startups, etc.



Business model Subscription service, paid API				
Taxaat waadkat	After launched in domestic market, expand to international news			
Target market	markets such as US, Japan, and China.			
Customers Newsy Stock, pibo, and FUND ONLINE KOREA				
Future plan				

Enter the U.S., Japanese, and Chinese news markets by developing global version apps

Name	Sysmetic	Establishment	stablishment In 2015		Hyejeong Park	
Phone	+82-2-6338-1880	E-mail	help@moya.ai			
Main Business Field		Atypical Analysis, Natural Language Processing based on Al, News big data analysis				
Main Pro	duct and Service	Mobile applications: MoYa, and Folo				
Investmen	nt history	80 million won				



SYSTRAN Co., Ltd.

www.systransoft.com

Company Identity

SYSTRAN is a global company with neural network-based machine translation technology capable of translating languages around the world

□ Tech & Service Info

	□ Vis	☐ Visual Intelligence		nd Intelligence	■ Language Intelligence
Coro Al	□ Da	☐ Data Driven / Modeling		a Processing	☐ Hardware / Robotics
Core Al	■ Re	■ Reinforcement learning		onomous driving	□ AGI
	□ AEI		□ XAI		■ Etc
Framew	o el c	Systran nmt		Data type &	Patent & Law Data
Framew	Ork	WizardTraining Sys		secure	(Self-owned)

Company's Core Al Explain

SYSTRAN have the technology to quickly create and provide Ai translation model for machine translation optimized for a specific domain, and also provide Neural Network Machine Translation technology that is much faster than competitors.

Product and Service Overview

SYSTRAN provides customized NMT engines based on the customer's knowledge data and translation engines with excellent translation quality for each domain for various language set. In particular, the recently released NMT engines offer superior quality and faster processing speeds compared to Open Source NMT engines.











Business model	SW License, Cloud, SaaS, Multilingual Patent Data Sales				
Target market	Patent & Law Data Market				
Customers	Korea Patent Office, Korea Customs Service, Wert Intelligence (KR)				
Future plan					

Enhance marketing strategy to enter overseas Patent data market and expand neural network machine translation language set in Patent field (European Region)

Name	SYSTRAN Co., Ltd.	Establishment	In 2018	C.E.O	Frank JEONG	
Phone	+82 42-472-6840	E-mail	roup.com			
Main Busi	ness Field	Patent				
Main Prod	duct and Service	SYSTRAN Enterprise Server PNS, IP KINGKONG				
Investmen	t history	N/A				

	_	

T3Q Co., Ltd.

www.t3q.ai

Company	Identity
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Since its founding in 2007, T3Q has secured new technologies such as open source, software architecture, big data, deep learning, and development methodology. As a group of experts that has provided technologies and platforms to companies such as Samsung SDS, KT / KTDS, Hyundai Motors, Samsung Heavy Industries, Samsung Electronics, SK Hynix, SK Corporation and KEPCO. T3Q is a smart company that has recently achieved results in big data and artificial intelligence businesses.

Tech	&	Service	Info
------	---	---------	------

	Vis	Visual Intelligence		Sound Intelligence		■ Language Intelligence
Core Al	☐ Data Driven / Modeling			ata Processing	☐ Hardware / Robotics	
Core Ai	■ Reinforcement learning		☐ Autonomous driving			□ AGI
	☐ AEI		□XAI		☐ Etc	
Framework		TensorFlow / Scikit-learr	1	Data type & secure		tomer Provided Data (Image, ument, Text, video, voice etc.)

Company's Core Al Explain

The Big Data, Artificial Intelligence combined platform is an "all-in-one" solution for processing, analyzing large amounts of real-time data that provides variety of Al services through Al technology and its ability to process big data. Not only can it reduce immense amount of time and cost for a client company but also deliver customizable, on-demand Al service from its flexible internal structure.

Product and Service Overview

1. High Scalability and Broad Usability

- Provides variety of algorithm service pack that are customizable according to the client / Diverse Al framework support

2. Real Time Processing and Edge Al Support

- Provides real-time services such as data gathering, storage, analysis including Artificial Intelligence / Reliability in instances of main system disorder or connection failure through data process and Al services from the edge system.

3. Simple Control

Al learning process serviced using simple UI controls

4. Variety of Analysis Engines and Algorithm

Wide range of analysis engines and algorithm provided to increase accuracy of Al.

5. End to End Solution

Data collection \rightarrow analysis \rightarrow storage \rightarrow visualize \rightarrow pre-process \rightarrow Al learning \rightarrow result analysis services provided in a single platform

6. Distinctive Performance

- Multi-GPU support in AI learning / Various acceleration engine service support such as TensorRT

Product and Service Image

See Business Info







- > 2018.08.22 Hosted by Korean Journalists Association & National Assembly - Convergence Innovative Economy Forum 'Fourth Industrial Revolution Power Korea, 2018: Smart Platform Service Award'
- > 2019.05.27. Good Software Certificate of Software quality

ъ	Al & Bigdata platform / Platform based SaaS / Al service development /			
Business model	Center - Edge Al system			
	Middle-end and low-end consumers with cost-effective demand / Defense			
Target market	(1,000 units), municipalities (234 ward offices), schools (12,000), hospitals			
Target market	(70,000), small and medium enterprises (10,000) / When the platform &			
	SaaS market matures, the market size is expected to be about 2 trillion won			
	KT, BC Card, Woori Bank, Shinhan Bank, Korea Electric Power Corporation,			
Customers	Hanhwa systems, Korea Internet & Security Agency, Ministry of Land,			
Customers	Infrastructure and Transport, Joint Chiefs of Staff, Air Force Headquarters, SK			
	Hynix, National Institute of Information and Resources, etc.			
Future plan				

- Improvement of Al/Bigdata platform T3Q.ai
- Activation of the platform-based SaaS model service
- Completing the Center/Edge Al system development
- Service divelopment and market expansion of defense and financial area

Name	T3Q Co., Ltd.	Establishment	In 2007	C.E.O	Park Byung Hoon	
Phone +82 2-6344-7660 E-mail		E-mail	t3q@t3q.com	l		
Main Busi	ness Field	Al/Bigdata Platform, Al Service Development				
Main Prod	duct and Service	T3Q.ai				
Investmen	t history	none				

TANKER Tanker Fund Inc.

https://tanker.fund/

Company Identity

Tanker Fund Inc is a proptech company which specializes in real estate valuation and estimation(proprietary automated valuation model). With this core technology, Tanker Fund operates platform services in the fields of property sales, rent, and finance.

Tech & Service Info

		☐ Vis	ual Intelligence	☐ Sound Intelligence		☐ Language Intelligence
C	Core Al	■ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics
	Core Ai	☐ Rei	inforcement learning	☐ Auto	onomous driving	□ AGI
		□ AE	I	□XAI		☐ Etc
Ī		work LightGBM, ElasticNe Proprietary RNN M			Data tama ()	Public registers & open
	Framewo					data(Government), price,
						auction data(by Tanker)

Company's Core Al Explain

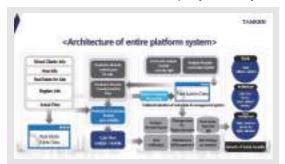
To minimize error rate and provide robust confidence intervals of given valuation results with high feature importance, we mainly use gradient boosting and utilize mixed learning methods together including ElasticNet and RNN.

Product and Service Overview

Loan applicants are able to served Automated/untact loan service with proprietary valuation model. The main parts of this services are automated collateral valuation with individual property features and automated contract and property registration.



- 2019.08.12 KORAIA AI Tech certification(Tanker Loan)
- 2019.08.07 Head of Korea Appraisal Board Awardee at KAB startup competition
- 2019.07.19 GIST Principal Awardee at Startup Industrial Al Competition
- 2019.04.09 TIPS startup by Ministry of SMEs and Startups









Business model	Consumer platform of property sales, rent, finance
Target market	Property sales, rent, mortgage(Residential \$41b, Commercial \$74b)
Customers	PAYCO(ROK/payment service), IBK(ROK/bank), SK C&C(ROK/IT) etc.

Future plan

With real estate automated valuation, we plan to establish consumer platforms which help real estate sales, rent, and financing. The next step will be a pioneer of Asian countries' proptech market which have limited benefits from AI technologies.

Name	TANKER Fund Inc.	Establishment	In 2015	C.E.O	Hyunseo Lim	
Phone	+82 2-518-1004	E-mail	ask@tanker.fund			
Main Business Field		Automated Valuation Model				
Main Product and Service		Tanker Loan, Find my home				
Investm	ent history	300000000 KRW(Infobank, 2018)				



www.testworks.co.kr

Company Identity

Testworks is a social enterprise and software testing specialized company. We offer various services in the field of software testing such as testing courses for training, testing services, and consulting.

☐ Tech & Service Info

	■ Visual Intelligence			■ Sound Intelligence		■ Language Intelligence
Core Al	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics	
Core Ai	☐ Reinforcement learning		■ Autonomous driving		☐ AGI	
	■ AEI		□XAI		☐ Etc	
Framework		Python-	Tensorflow,	Keras	Data type & secure	video, image, sound files (self)

Company's Core Al Explain

Specialized Platform to Collect and Process Al Learning Data

- 1) Collect diverse data (images, sounds, text)
- 2) Collect data used in different types of businesses (ex. automated cars, face recognition, emotion detection, color, and food)
- 3) Systematic work managed through teaching employees how to collect and annotate data.
- 4) Various end to end services provided to different clients that align with what was requested
- 5) 3 step review system to increase data quality

Product and Service Overview

Specialized Platform to Collect and Process Al Learning Data

- 1) Collect diverse data (images, sounds, text)
- 2) Collect data used in different types of businesses (ex. automated cars, face recognition, emotion detection, color, and food)
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- 4) Various end to end services provided to different clients that align with what was requested
- 5) 3 step review system to increase data quality





- 2018.10.18. Social Enterprise Certification
- 2018.05.30. Venture Business Certification
- 2019.04.01. Award of Excellence / Korea Technology Finance Corporation
- 2017.07.10. Women-friendly Social Enterprise Idea Award / Ministry of Gender Equality and Family









Business model	SAAS
Target market	1) Target companies that need data processing for Al development (self-driving cars, face and emotion recognition) / 2) Grow to become a global company that provides second chances to social minorities (the disabled, career discontinued women, and the passionate young) who have much potential to offer their skills back to society
Customers	Samsung Electronics, Honeywell Analytics, Microsoft

Future plan

Testworks strives to become an ever-growing social enterprise that delivers high quality datasets to various business that are becoming abundant in the 4th industrial revolution. Testworks future plan is to become a global company by not only engaging with other enterprises to successfully utilize Al into our daily lives, but as a social enterprise, to help society's minority groups by giving them a second chance to show their potential to become a useful member of society.

Name	Testworks Inc.	Establishment	In 2014	C.E.O	Dale(Sukwon) Yoon	
Phone	+82 2-423-5178	E-mail	mp@testworks.co.kr			
Main Business Field		Software Testing, Consulting, Collect and Annotate Al Learning Data, Check Web Compatibility				
Main Product and Service		Software Testing, Consulting, Collect and Annotate Al Learning Data, Check Web Compatibility				
Investment history		D3 Jubilee Partners 1 billion won, 2019				



ThinkWave Inc.

www.thinkwave.co.kr

Company Identity

Petmate using sensor and ICT technology recognizes biosignal data according to pet's behavior pattern and manages it as big data, and uses artificial intelligence technology to induce emotional (language) inference based on recognized data. Provides emotional care service Pet @ II, such as pet home care.

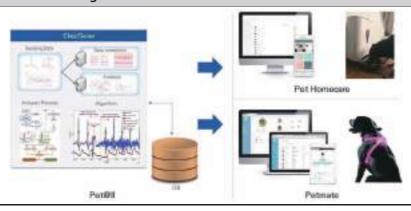
□ Tech & Service Info

	☐ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence
C A1	■ Data Driven / Modeling		■ Data	Processing	☐ Hardware / Robotics
Core Al	■ Reinforcement learning		☐ Autonomous driving		☐ AGI
	□ AEI		□XAI		□ Etc
Framework		TensorFlow, Keras,	BeeAl	Data type & secure	Pet Bio-signal (Self Securing)
Company's Core Al Explain					

Applies data modeling and deep learning based on companion animal biosignal data.

Product and Service Overview

Pet @ II recognizes the dog's biological signal through a sensor of emotional reasoning wearable (hereinafter referred to as "Petmate"). It uses artificial intelligence to infer emotional (language) information and provides it in human language such as "Please take me to the hospital.", "Please feed me hungry." According to the emotional reasoning, it provides emotional care services to pet care in connection with "painful", "hungry", "boring".



- 2018.02.15 Participated in Google Global Pitching Competition (Silicon Valley, USA)
- 2018.05.21 African Development Bank (AfDB) "Idea Contest" Award & Pitching, Exposition
- 2018.11.29 International Technology Transfer Conference/Korea-China Advanced Technology Transfer Special Meeting
- 2019.07.07 Participated and exhibited RISE Global Pitching Competition













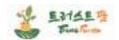


Business model	Petmate, Pet HomeCare hardware rental and information service fee, Additional feed relay service and advertising fee for platform
Target market	Korea, USA, Japan, China, France / Global Pet Market Size 384 trillion KRW
Customers	Core target customers among those in their 20s and 40s who regularly visit veterinary hospitals and receive medical treatment and vaccination.

Future plan

- · Advancement of pet emotional (language) reasoning and disease reasoning service and pilot
- · Emotional (language) reasoning TTS function interlocking and expansion of pet service

Name	ThinkWave Inc.	Establishment	In 2017	C.E.O	Younghee, Lee	
Phone	+82-10-8702-4702	E-mail iam202.hermes@gmail.com				
Main Business Field		Pet emotional care service (pet health care service, pet home care service) based on dog's emotional (language) inference by engineering bio signals according to behavior patterns using sensors and ICT technology				
Main Product and Service		Petmate, Pet HomeCare, Pet@ll Service				
Investment history		Attracting investment of funds required for upgrading and mass production of services				



TRUSTFARM MOBILE CO,.LTD.

http://www.trustfarm.io

Company Identity

We are researching and developing AI related products and solutions, which based on blockchain, videoprocessing, IoT. Especially, We focusing on innovate our XRTube (video streaming) service, we are develop and product high speed, low power consumption FPGA Card what specialized on processing video deeplearning, blockchain reward system, AI data marketplace based on blockchain technology.

And We are interested and research , middle-longterm RnD, on Neuromorphic SoC , many core architecture, it is very excellent performances on video processing.

☐ Tech & Service Info

	■ Visual Intelligence		☐ Sound Intelligence	☐ Language Intelligence	
Core Al	☐ Data Driven / Modeling		☐ Data Processing	■ Hardware / Robotics	
	☐ Reinforcement learning		☐ Autonomous driving	□ AGI	
	□ AEI		□XAI	☐ Etc	
Framework		TFoser (OpenPose BASE)	Data type & secure	Open dataset, YouTube, KISA standard dataset	

Company's Core Al Explain

- Video deeplearning processing optimized highspeed, low power consumption FPGA card.
- Adaptive Video Streaming technology and Video transcoding technology.
- Video object tracking technology.

Product and Service Overview

- FPGA AI/Mining PC Card (HW).
- XRTube : Scalable and Efficient Super ultra hd video streaming platform
- Blockchain, Al developer education and training service.







- 2018.08.21. Al IoT Robotics Conferences Speaker , Paris Holiday Inn conference
- 2018.09.12. Blockchain scalability speaker/moderator , Seoul Hyatt tokenizeit
- 2019.04.25. World IT Show 2019 Coex, Exhibition FPGA Card/XRtube
- 2019.07.20. World AI EXPO 2019 Coex, Exhibition AI FPGA Card/XRtube







Business model	HW Sales, Solution Sales, Investment, Education/Training			
Target market	Global / 100M \$			
Customers Global blockchain/Al/mining/Video Processing startups				
Future plan				

- Video optimized FPGA AI card development and sales. SDK Eco expand.
- Video transcoder development and sales based on FPGA AI card.
- TFoser (human tracking) feature + FPGA Card technology integrate to XRTube service.
- Recruitment and expand developer pool with our blockchain AI academy service.
- Develop DID(Decentralized ID) and AI data market place, It will integrate to our blockchain technology.
- Moneytization of our blockchain patent (Forkless OTA feature korea,china,usa) , Provide enterprise blockchain development services.
- IoT blockchain development (it is main goal of our TAO Foundation blockchain universe) , it will opensource edge type IOT SW Stack, AI and Blockchain technology can do apply on sensor devices.
- Futhermore, mid-longerterm Researching on Neuromorphic SoC many core architecture, which is very similar with humans' neuron system, for realize in realworld.

Name	TRUSTFARM MOBILE	Establishment	In 2017	An Gyutae		
Phone	+82 1566-9153	E-mail	info@trustfarm.net			
Main Business Field		Al / blockchain				
Main Product and Service		FPGA Card / Education,training service/ blockchain				
Investmen	t history	personal money, dept from bank.				



Twinny Co.,Ltd.

https://twinny.net/kr/

Company	Identity
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Twinny is a company specialized in software development. Based on the researching achievements of KAIST, we are researching and developing autonomous mobile robots. We are also developing and providing mobile service platform for easier communication for better quality of life.

	Tech	&	Ser	vice	Info
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Core Al	☐ Visual Intelligence			☐ Sound Intelligence		☐ Language Intelligence
	☐ Data Driven / Modeling			☐ Data Processing		■ Hardware / Robotics
	☐ Reinforcement learning		■ Autonomous driving		☐ AGI	
	□ AEI		□XAI		☐ Etc	
Framework		self	Da	ta type & secure	self	

Company's Core Al Explain

■ Self-driving technology strength

- 1. Estimation of self-location in complex environments
 - Estimation of accurate self-location in complex interior space without the need for infrastructure deployment
- 2. Strong target recognition and follow-up technology without additional devices
 - Strongly recognize and follow targets despite changes in lighting and sudden appearance of obstacles
- 3. Avoiding Dynamic Obstacles
 - In easily avoid moving targets and drive smoothly
- 4. Price Competitiveness
 - Affordable compared to competitors using low-priced sensors, but with higher performance

Product and Service Overview

1. Carrying self-driving cars 'Nargo'

- Move in a rail-free environment in an organic manner without any physical connection between vehicles
- You can carry a lot of things in a narrow passageway.
- Improve the productivity of ordering operations in the logistics system.

2. Follow the self-driving robot. 'Targo'

- Tweeney's follow-up robot can distinguish targets and obstacles from each other in a variety of environments without additional infrastructure or devices
- Build a reasonable price range compared to other companies based on a low price sensor (Depth Camera)



- 2017. 12. 06 Korea Small and Middle enterprises innovation price
- 2019. 08. 09 PRICE FOR GLOBAL STARTUP FESTIVAL DAEJEON 2019 INVESTMENT PT AUDITION 3 patent applications / 5 patent registrations











Business model Robotic Software Platform Based on Data Cloud					
Target market Logistics Robot Market Size -It is expected to double from 35 billion won in 2015 to 700 billion won in 2020.					
Customers	KT (Korea) - Communications Autech (Korea) - Air conditioning, air purifier E-Mart (Korea) - Mart Bloombista Hotel (Korea) - Hotel				
Future plan					

- 1. Entry into the logistics industry
- 2. Market, Entering the Hotel World

Name	Twinny Co.,Ltd.	Establishment	In 2015	C.E.O	Youngseok Cheon Hongseok Cheon	
Phone +82 10-2336-7490 +82 10-4816-7490		E-mail	hscheon@twinny.co.kr			
Main Busi	iness Field	Autonomous rob	oot			
Main Prod	duct and Service	TarGo An autonomous shopping cart that will free both hands of customers in a mart or shopping mall NarGo Autonomous freight train, Hamelin, can easily transport large quantities of goods from warehouses or factories				
Investment history		2 billion won (Neoflux, 19 years) 2 billion won (AutechGroup, 18 years) 1 billion won (Korea SMEs and startups Agency, 18 years) 300 million won (Kate Foundation, 17 years)				



Two Block Al

www.twoblockai.com

Company Identity

We build Social ChatBot service by using Deep NLP technology and experience on Conversational Al. We focus on the Human. We try to capture emotion, personality, experience, hobby of each person by chatting with ChatBot. It's because, ChatBot can help as much as her understanding. Curiosity about the human creates Al.

□ Tech & Service Info

Core Al	☐ Visual Intelligence		■ Sound Intelligence		■ Language Intelligence
	☐ Data Driven / Modeling		☐ Data Processing		☐ Hardware / Robotics
	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI
	■ AEI		□XAI		☐ Etc
Framewo	rle	Self	Data type &	Kora	n Text/dialog Corpus
riaillewo	IK	3611	secure	over	than 100G

Company's Core Al Explain

Classical NLP Stacks: Korean, Japanese, Chinese morphological analyzer & language understanding

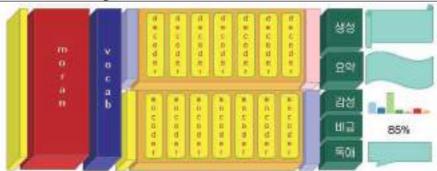
Deep NLP Models: Korean BERT / GPT-2 model, Word embeddings

Speaker verification: Speaker voice matching from mic input

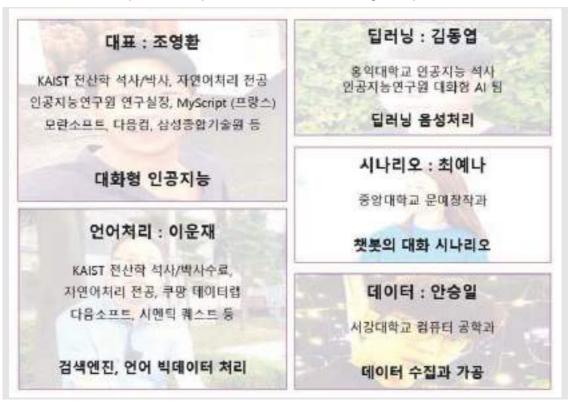
Sentiment Analysis: Basic emotion analysis and sentiment analysis on 10 domains

Product and Service Overview

- Deep NLP Package: Korean Deep NLP model SW/HW Package with Korean Language Parser - Social ChatBot: Human Match maker within naturally crafted profile by chatting - User Profile Hub: Shopping aid chatbot within naturally crafted profile by chatting



- 2019, NIPA, Open Al Competetion Winner (150K\$ Budget acquire)



Business model	HW Combination, License, AI speaker and Mobile App Service			
Target market	Deep NLP : 5M\$ / SocialChatBot : 300M\$			
Customers	Under recruitment of customers			
Future plan				

- Dec. 2019 : Korean Deep NLP Package

- Jun. 2020 : Social ChatBot Service launching

Name	Two Blocks AI	Establishment	In 2019	C.E.O	CHO, Young Hwan	
Phone	+82 70-8728-2233	E-mail info@tbai.info				
Main Business Field		Deep NLP / Social ChatBot				
Main Product and Service		BUTTER BLOCK / CHOCOLAT BLOCK				
Investment history		N/A				



URBANUNION

www.urbanunion.co.kr

Company	Identity
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Urban datalab is composed of top experts in Al and fashion technology, and digital transformation of fashion industry through digitalization of fashion industry based on cutting-edge machine learning technology.

☐ Tech & Service Info

Carra Al	Vis	Visual Intelligence		nd Intelligence	■ Language Intelligence
	■ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics
Core Al	☐ Reinforcement learning		☐ Autonomous driving		□ AGI
	☐ AEI		□XAI		☐ Etc
Framewo	rk	Showfit lends		Data type &	fashion image (self)
				secure	

Company's Core Al Explain

Exobrain detail technology and fashion image analysis technology

Product and Service Overview

Urban Union is operating a trend, which is operated as a demonstration service.

- 1. The goal of the service is to be a fashion Al company whose clothes are not what you want to sell, but what you want to buy.
- 2. Trendit is a strategic service that "finds real trends and reflects them in real time.
- 3. Urban Union achieved 14 turns of product turnover rate of 94% (accumulated sales rate in 1H19), which is difficult to achieve in the fashion industry using 'artificial intelligence' and 'big data' through trend.
- 4. It is expanding at department store retail stores, achieving 1st in sales and 1st in growth rate.









- '2016 Year Money Today Organizer (Miraebu) "Korea Mobile App Award" App of the Month





Business model	Smart offline fashion retail			
Target market	The domestic fashion market recorded about 43 trillion won in 2019 1.Women's and casual apparel market, which is the major target of urban union through trend, is estimated at 19 trillion won, about 44% 2. The fashion apparel offline market is about 10.5 trillion won 3. Target sales of 2021 billion by trend 4. Expansion of smart offline overseas market through fashion trend report in			
	2022			
Customers	Dongdaemun Wholesale Market & Soho Mall			

Future plan

- 1. Tradits target about 100 billion won in 2021, the Korean fashion goal
- 2. Target sales of 200 billion KRW directly by expanding into obedience and fashion market through trend analysis after women's wear and casual clothing market, which is Urban Union's main target through trend
- 3. Opening the platform through Dongdaemun market and Soho Mall trend report in the second half of 2020 through trend analysis
- 4. Expansion of smart offline overseas market through fashion trend report in 2022 Real trend fashion brand that analyzes the fashion of each global country

Name	URBANUNION	Establishment	In 2010	C.E.O	AN CHISUNG(JASON)	
Phone	+82 2-515-1152	E-mail	webadmin@urbanisom.com			
Main Business Field		FASHION TECH				
Main Product and Service TRENDIT						
Investmen	t history	100 million won (ETRI holdings `19)				



VisualCamp Co., Ltd

www.visual.camp

Company Identity

VisualCamp, the No.1 eye-tracking company in Korea has A.I. based eye-tracking technology for mobile environment. Control your mobile screen with eye-gaze movement and get insight by analyzing users' gaze data.

☐ Tech & Service Info

Comp. All	■ Visual Intelligence	☐ Sound Intelligence	☐ Language Intelligence
	■ Data Driven / Modeling	■ Data Processing	☐ Hardware / Robotics
Core Al	☐ Reinforcement learning	☐ Autonomous driving	□ AGI
	☐ AEI	□XAI	☐ Etc
Framewoi	k Tensorflow, Keras	Data type & secure	Image / Video

Company's Core Al Explain

We develop eye tracking A.I that also called Apperance-based gaze tracking. It' only requires front camera of smartphone and tablet. Current model predicts x,y coordinates of the devices' screen by using images of user's face, landmark, and both eyes. The number of parameter of this model is 20,500, but we made it lighter so that it could run in real time.

Product and Service Overview

TrueGaze Mobile SDK

- SDK(software development kit) for mobile app developers
- NO extra camera required
- Applicable area 1: Mobile Usability Test (Game QA)
- Applicable area 2: Gaze interactive contents (Scrolling Webtoon with eyes)
- Applicable area 3: Gaze based product recommendation model (Shopping mall)



- 2018.12.10 4th Shinhan Bank Demoday 'Released Eye Control ATM'
- 2019.04.24 Won 'Prime Minster' award from Korea ImpacTech Award
- 2019.08.26 Won 'Prime Minister' award from ITS Innovation technology
- 2019.10.21 Selected as top 10 companies from 2019 World Conference on VR Industry









Business model	SW License		
Target market	Global Data Market (IDC) Size 2018 166B\$, 2022 260B\$ / A.I will		
Target market	contribute 13 trillion\$ to global economy until 2030 (Mckinsey)		
	- Medical: Konkuk Univ hospital rehabilitation center (Korea)		
Customore	- Well-being & Art: Beijing Art Association (China)		
Customers	- R&D: Kyeonghee Univ, Aju Univ (Korea)		
	- Education: SK C&C - Kyowon, 0xflow (Korea)		

Future plan

VisualCamp is building smartphone eye tracking ecosystem by distributing free mobile SDK currently. We have plan to create mobile gaze data based SaaS business model in 2020.

Name	VisualCamp	Establishment	In 2014	C.E.O	Yunchan Suk
Phone	+82 70-7945-7799	E-mail	contactus@visual.camp		_
Main Business Field Eye-Tracking S		Eye-Tracking So	ftware		_
Main Product and Service TrueGaze Mc			e SDK		_
Investment history 2018 Serie			nvestment \$1.5	δM	



Company Identity

VUNO delivers innovative standalone, cloud-based, and integrated deep learning applications that significantly improve physician's workflow while enhancing patient care. From imaging modalities like X-rays and CT scans to biosignal monitoring systems, VUNO provides a diverse array of services that quantifies and analyzes data to diagnose diseases. The medical diagnostic support platform, VUNO-Med, is built on top of proprietary AI engine, VUNO-Net, that leverages high quality large-scale medical data and enables real-time experience and allows the results of services to be analyzed from anywhere.

☐ Tech & Service Info

Core Al	■ Visual Intelligence	Sound Intelligence	☐ Language Intelligence	
	☐ Data Driven / Modeling ☐ Data Processing		☐ Hardware / Robotics	
Core Ai	Reinforcement learning	☐ Autonomous driving	☐ AGI	
	☐ AEI	☐ XAI	☐ Etc	
Framework	VUNO uses VUNO-Net™ & various frameworks	Data type & secure	Various medical data (X-ray, CT, MRI, Funduscopy etc)	

Company's Core Al Explain

VUNO has undergone rapid R&D by developing and optimizing the modules needed for the entire process, including labeling tools, image preprocessing algorithms, learning algorithms, and clinical trial support tools, which are necessary for the development of AI medical image analysis solutions. In addition, VUNO developed VUNO-Net ™, a deep learning engine specialized in the medical field, to optimize memory usage by minimizing unnecessary operations. This enables embedding on low-end hardware of general medical equipment and allows the economic use of cloud service support.

Product and Service Overview

■ VUNO Med® - Bone Age

"The first AI- based diagnostic software in Korea for bone age assessment"

■ VUNO Med® - DeepBrain

"Brain Parcellation for the quantification of neuro degenerative disease"

■ VUNO Med® - Chest X-ray

"Al-based diagnostic support system for abnormalities in chest X-ray"

■ VUNO Med® - Fundus Al

"AI-based automated, fundus imaging solution"

■ VUNO Med® - Lung CT Al

"Al-based pulmonary lung nodule detection and reporting system"

■ VUNO Med® - DeepEWS

"Al-based early warning system for adverse events"

Product and Service Image



We have developed the trend so that we can predict the emergencies that are likely to occur in the future by learning the trends with Al.





- Ø Ranked in the top 1% of 3,000 teams in the Pneumonia Detection Challenge for the RSNA Kaggle challenge in 2018
- Ø Ranked 1st at the Al Startup Challenge sponsored by Amazon Web Services (AWS) in 2018
- Ø Won the Digital Transformation (DX) award in Korea in 2018

Business model	VUNO's the medical device interlock model is a business model that integrates software into medical devices to provide artificial intelligence readings as a function of the device.			
Target market	Main target markets: Domestic and global hospitals, PACS companies, medical equipment companies, and etc. Size: According to Allied market research, the world's artificial intelligence healthcare software market is expected to reach \$ 14,587 million by 2023, with an average annual growth rate of 47.6% from \$ 940 million in 2016.			
Customers	Major hospitals in Korea and global			
Future plan				

■ Expand business by developing and commercializing various AI medical solutions

- VUNO has more than ten products in the commercialization stage, and even more products in the R&D stage, and is expanding AI applications from not only diagnosis but also to the medical field such as treatment and prognosis/prediction.

■ Expansion of domestic and international partnership

- Promote collaboration with medical imaging companies, such as overseas medical device companies and PACS companies, and promote sales by linking VUNO's products to partner products.
- Through joint research with major overseas hospitals and HCPs, we will proceed with localization of products according to the clinical environment and ethnic characteristics of each country, strengthening the capacity for local commercialization

Name	VUNO Inc.	Establishment	In 2014	C.E.O	Yeha Lee	
Phone	+82.2.515.6646	E-mail	hello@vuno.co			
Main Busi	ness Field	Medical AI sof	tware			
Main Product and Service Investment history		▲VUNO Med@	®-BoneAge ▲ VUNO	Med®	-DeepBrain	A
		VUNO Med®-Chest X-ray ▲ VUNO Med®- DeepASR				
		\$ 3 Million ('16	Series A Investment b	y SBI Inv	estment Kore	a,
		Smilegate Inves	tment Korea and HB In	vestment)		
		\$ 5 Million ('18	Strategic Investment by	y Green C	Cross Holding:	s)
		\$ 6.7 Million	('18 Series B Investm	ent by	futureplay, S	ВΙ
		Investment Ko	rea, Smilegate Invest	ment Ko	orea and H	łВ
		Investment)				



Vvind Company

Wind.in

☐ Company Identity

Vvind Company pursuits the music that composed by artificial intelligent which express the human emotion.

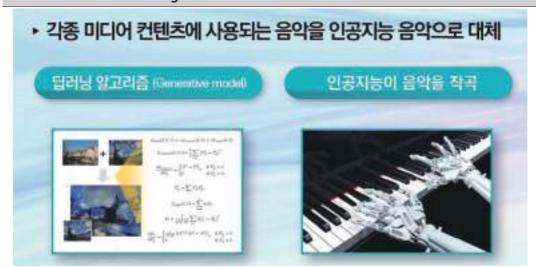
☐ Tech & Service Info

Framework Company's Core		music transforme	er ———	Data type & secu	ıre	Private
	□ AEI		□ XAI		Etc	
Cole Ai	☐ Rei	nforcement learning	☐ Auto	onomous driving	□ A	GI
Core Al	☐ Dat	ta Driven / Modeling	☐ Data	a Processing	□Н	lardware / Robotics
	☐ Visual Intelligence		Sound Intelligence			anguage Intelligence

Music composing algorithm

Product and Service Overview

Music for commercial film by Al.



- 2019.07.19 Korea Artificial Intelligence Association conducted "AI+X competetion" excellence award.
- 2019.08.12. Korea Artificial Intelligence Association, Al Tech





Business model	selling music					
Target market	domestic commercial film music market 300 million dollar.					
Customers commercial film music PD						
Future plan						

Commercial film that uses the music composed by artificial intelligent.

Name	Name Vvind Company		In 2019	C.E.O	Seung-wook SHIN	
Phone +82 10-9328-9511		E-mail	zephyr@vvind.in			
Main Business Field		Al music creation				
Main Product and Service Name		Al music creation				
Investment history		N/A				



Weisure

www.drsotong.com

Company Identity

Weisure is creating the future of digital healthcare. We are the official Kakao OpenBuilder Chatbot Agency and Naver Toktok Official Chatbot Builder, an Al concierge based on communication (voice and text) so that various medical services Service can be optimized and activated through Al technology.

□ Tech & Service Info

	☐ Visual Intelligence	☐ Sound Intelligence	■ Language Intelligence	
Core Al	☐ Data Driven / Modeling	☐ Data Processing	☐ Hardware / Robotics	
Core Ai	☐ Reinforcement learning	☐ Autonomous driving	☐ AGI	
	☐ AEI	□XAI	☐ Etc	
			medical dictionary/	
Framewor	Tensorflow, Keras	Data type & secure	customer's text and national	
			medical related site(self)	

Company's Core Al Explain

Pattern recognition, natural language processing, web crawling, text mining, counseling big data, medical treatment and recommendation technology

Product and Service Overview

Chatbot service using KakaoTalk and Naver TokTalk

24-hour, real-time hospital complaint resolution

Statistical keyword extraction for consultation and question

Reservation related and consultation available

Services to Improve Patient Experience Satisfaction

Preliminary inquiry and follow-up program services

Product and Service Image



Classify complaints, treatment by medical departments, classify surgery contents, build medical dictionary/ data acquisition, learn from customer's text and national medical related site(self)

-2018.03.19. COEX International Medical Devices Exhibition





Business model	HW Combination, SaaS
Target market	Global Chatbot Market /Expected to increase to 3,487 billion won
raiget market	by 2021Domestic hospital chatbot market reached 124.8 billion won
Customers	Pusan National University Hospital & Medical
Customers	Hallym University Medical Center & Medical
	Future when

Future plan

Health Insurance Assessment Agency data learning and API linkage

Simple insurance billing and payment through OCS linkage

Data learning to build voice AI speakers

Name	Weisure	Establishment	2018	C.E.O	Park Hae Yu	
Phone +82 70-4616-2468		E-mail Boss@weisure.co.kr				
Main Busi	iness Field	Medical Concierge Service (Chatbot)				
Main Product and Service		Drsotong(carebot, caretok, carebot manager)				
Investment history		- 100,000,000won(Oracleland, '18yr) - 70,000,000won(DHP, '18yr) - 130,000,000won(Aim med, '19yr) - 300,000,000won(B bridge, '19yr)				



WERT Intelligence

www.wert.co.kr

Company Identity

Wert Intelligence is operating Korea's first AI patent search engine keywert service developed with unique technology after years of R&D. keywert is evolving from moment to moment from our R&D center of patent attorneys and data scientists based on your feedback. Based on our advanced technology, which was selected as one of the NIA's TOP 100 data and AI innovators in the IP industry for the first time in the NIA. Under vision, "Everyone should be able to easily use the patent information", we are constantly launching new services such as AI patent search engine, keywert with Global litigation Data, new Patent Evaluation Model (keyValue) and AI Patent Translation service, IP KINGKONG (ipkingkong.com). We look forward to your interest and support for Wert Intelligence, which is constantly dreaming of evolution and change.

	Tech	&	Serv	ice	Info
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	☐ Visual	Intelligence	☐ Sound	d Intelligence	☐ Language Intelligence
Core Al	☐ Data D	riven / Modeling	■ Data Processing		☐ Hardware / Robotics
	☐ Reinfor	cement learning	☐ Autonomous driving		■ AGI
	☐ AEI		■ XAI		☐ Etc
Framework	Self Data type & secure		Patent, Related DB, Generated DB (Self)		

Company's Core Al Explain

Keywert is a patent search engine to overcome search obstacles with Al and real-time analysis engine technology. The existing patent search system involves a one-way communication process that provides only the patent data requested by users. Keywert provides the results desired by users through two-way communication. Keywert is an Al patent search engine. To create it, completely new technology was applied through analyzing statistics of big data from various patent data sources, including claims, patent families, biographical information, and the knowledge and know-how of patent attorneys.

Such innovation is based on our real-time analysis techniques. Users can quickly and accurately find patents similar to techniques that they want to find based on agreement with their search strings, similarity between patents, features of each technological area and results of text mining.

Product and Service Overview

Keywert is a patent search engine to overcome search obstacles with AI and real-time analysis engine technology. The existing patent search system involves a one-way communication process that provides only the patent data requested by users. Keywert provides the results desired by users through two-way communication. Keywert is an AI patent search engine. To create it, completely new technology was applied through analyzing statistics of big data from various patent data sources, including claims, patent families, biographical information, and the knowledge and know-how of patent attorneys.

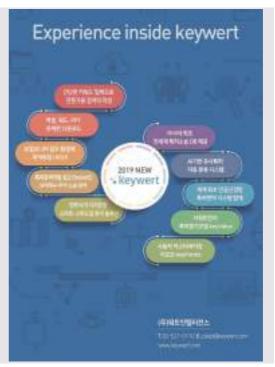
Such innovation is based on our real-time analysis techniques. Users can quickly and accurately find patents similar to techniques that they want to find based on agreement with their search strings, similarity between patents, features of each technological area and results of text mining.

Product and Service Image

See Business Info

- ➤ We won the Best Content Award at the Exhibition with the support of many visitors for three consecutive years.
- > We was selected as one of the NIA's TOP 100 data and AI innovators in the IP industry for the first time in the NIA.





Business model	Web based Service
Target market	Patent / Research Market
Customers	Enterprise, University, Patent Law firm

Future plan

Under vision, "Everyone should be able to easily use the patent information", we are constantly launching new services such as AI patent search engine, keywert with Global litigation Data, new Patent Evaluation Model (keyValue) and AI Patent Translation service, IP KINGKONG (ipkingkong.com). We look forward to your interest and support for Wert Intelligence, which is constantly dreaming of evolution and change.

Name WERT Intelligence		Establishment	In 2015	C.E.O	YUN, Jung-Ho	
Phone	+82-2-521-0110	E-mail	wert@wert.co.kr			
Main Busi	ness Field	Patent Search & Analytics Service (DataBase)				
Main Prod	duct and Service	keywert (Al Pa Patent Translat	tent Search Engi ion)	ne), IP Ki	ngkong (Al	
Investmen	t history	N/A				



WSEiTech Co., Ltd.

www.wise.co.kr/en

Company	Identity
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WISEiTech provides Al and Bigdata solutions and services

☐ Tech & Service Info

		☐ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence	
Como Al	Core Al	■ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics	
	Core Ai	■ Reinforcement learning		☐ Autonomous driving		■AGI	
		□ AEI		☐ XAI		□ Etc	
Framewor		rk	Phython, Tensorflo	W,	Data type &	Customers data	
		Keras, scikit-learn		secure			

Company's Core Al Explain

WiseProphet. It is a machine learning process automation platform that draws prediction results easily from various forms of data. WiseProphet provides the best models according to the user's specifications by utilizing various machine learning algorithms and features.

Product and Service Overview

Easy-to-use

allowing domain experts and citizen data scientists to utilize machine learning without having to code. WiseProphet allows a user to conduct the whole autoML process through only mouse-clicks in an intuitive user interface that is easy to navigate. WiseProphet utilizes automated feature engineering to greatly shorten the time a user spends on data preparation

2 Support variety of data

WiseProphet is also able to integrate a variety of data. It can extract features not only from structured data but also from unstructured data such as text and images.

③ Various Al algorithms

Our product provides support for various algorithms, such as ones for regression, classification, clustering and deep learning, while also providing open-source model integration.

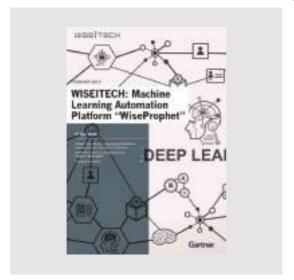
4 Visualization

WiseProphet integrates the industry's state-of-the-art visualization suites, giving the user an intuitive display of forecast results in the form of interactive dashboards.

Product and Service Image

See Homepage

- 2019 Korea Public Procurement Service "Innovation Prototype"
- 2019 Garner Newsletter Machine Learning Automation Platform "WiseProphet"





Business model SaaS, Solutions and services provider			
Target market	Goverment, Enterprise		
Customers	Korean goverment agencies and Global Enterprises		

Future plan

Make WiseProphet globaly SaaSify

Name	WISEiTech Co., Ltd.	Establishment	In 1990 C.E.C		Jonghyun Kim	
Phone	+82-2-6246-1400	E-mail	contact@wise.co.kr			
Main Business Field		Public, Finance, Engineering, Media, ETC				
Main Prod	duct and Service Name	WiseProphet, WiseIntelligence, WiseDQ				
Investmen	nt history	0.8M USD (Sticventures, 2018)				



Wonderful Platform Co.,Ltd

www.1thefull.com

Company Identity

Based on Al's core technology, natural language process, chatbot, image processing, and data analysis technology, Wonderful Platform LTD combines robots and APPs to provide O2O platform services to care not only the elderly but also the active senior generation. The company has abundant experience in winning government projects from the Ministry of Science and ICT and the Ministry of Trade, Industry and Energy.

☐ Tech & Service Info

Core Al	■ Visual Intelligence	■ Sound Intelligence	■ Language Intelligence
	■ Data Driven / Modeling	■ Data Processing	■ Hardware / Robotics
	■ Reinforcement learning	☐ Autonomous driving	■ AGI
	■ AEI	■ XAI	☐ Etc
Framework	Senior care Service Platfo	rm Data type & secure	Voice, video, image, text (self and cooperation)

Company's Core Al Explain

Image Recognition: Senior's face / expression recognition and fall detection.

Chatbot / Natural language: Patent with helper in consideration of senior's sullen tone and small, slow voice.

Data analysis: Analyze and visualize structured and unstructured data collected from senior lifestyles using machine learning / deep learning technology.

Al Convergence Platform: An integrated platform that combines Al technology with mobile devices and robots.

Product and Service Overview

- <Product>
- 1. Combined senior care holder (supplied low-cost type)
- : If you put your smartphone on the cradle, the smartphone operates in senior care mode.
- 2. Home Robot 1 (General Type)
- : LG Electronics Home Robot (Product Name: Chloe) / China's Lubosa Home Robot (Product Name: VinQ) Senior Care Robot that combines Wonderful Platform Al SW with HW exclusively
- 3. Hologram Box (Advanced)
- : Self-produced holographic Al speaker exclusively provided with SK Telecom laser optical technology



- <Service Overview>
- 1. Artificial intelligence technology convergence service to cope with the senior care problem of the aging age
- 2. O2O platform service for seniors and elderly seniors living alone by combining AI technology with robots and APP

- Demonstrated 200 households of senior citizens living alone under the supervision of Gimpo in 2019.
- The Seoul Senior Citizens Welfare Center, Seocho-gu Office, and Pungnap Social Welfare Center held a demonstration of senior citizens living in Seoul in 2019.
- Demonstration of senior citizens living alone under the Gwangmyeong, Bucheon, Ansan, Gwangju City Hall in 2019.
- Junggu-gu, Dalseo-gu office, senior citizens living alone will be held in 2019.





	It is a platform service for building senior-only O2O platform for seniors				
Business model	living alone and protecting senior citizens who live alone and self-managed				
	by integrating AI technology, robots and APP				
	(Domestic)2019-64 trillion won/2020-72 trillion won/2021-82 trillion won				
Target market	(Overseas)2019-2,235 trillion won/2020-2,411 trillion won/2021-2,714 trillion				
	won				
	-SK Telecom (Korea) partnered with laser optical engine technology				
	-LG Electronics (Korea), exclusive supply of Chloe robot				
Customers	-CJ OliveNetworks (Korea) signed an alliance with Al-based store				
Customers	automation / unmanned business				
	-DWAVE (Canada), Deep Learning Technology Partnership				
	-Altumview (Canada), Image Recognition Technology Partnership				
Future plan					

Based on self-developed senior care patents, we provide services to heal the brain health and minds of the elderly in local governments, homes for the elderly, and nursing homes. We want to supply a variety of products in monthly fee form for selection

Name	Wonderful Platform Co.,Ltd	Establishment	2016년	C.E.O	S.Y. Koo	
Phone	+82-2-2297-9383	E-mail	ceo@1the	full.com		
Main Bus	iness Field	Al Robot / Senior Care Platform / Al Convergence Platform				
Main Pro	duct and Service	1. Senior Care : Dasom, Octos, Senior care cradle 2.Robot : Beanq, ELF, Nano				
Investmen	nt history	5.3M\$ (Angel Investment, Private Investment Association, Crowdfunding)				



Xinapse Co., Ltd.

www.xinapse.ai

Company Identity

Xinapse, a startup based on artificial intelligence and big data technologies, brings new value to businesses and customers with innovative technologies such as proprietary inference-based natural language processing engines, topic modeling, autolabeling, and speech synthesis.

☐ Tech & Service Info

Come Al	☐ Visual Intelligence		Sound Intelligence		■ Language Intelligence
	☐ Data Driven / Modeling		■ Data Processing		☐ Hardware / Robotics
Core Al	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI
	□ AEI		☐ XAI		☐ Etc
Framewo	when Tanaanslavy Dystana		2	Data type &	News data(from
riamewo	JIK.	Tensorflow, Pytorch	ı	secure	partners), Audio(Self)

Company's Core Al Explain

NLU engine(Inferencing based on general-specific methods provides better insight into user intents compared to general rule-based methods and leads to correct responses with relatively less data), Topic modeling(Topic modeling applied to chatbots and service planning by analyzing vast customer data and classifying user requests can be classified more precisely and quickly than traditional human classification, which reduces costs), Auto labeling(Auto labeling, which labels entire unstructured big data based on the results of labeling partial data, reduces errors and costs and time compared to traditional methods used by humans), Speech synthesis(Synthesize new voices based on existing voice data)

Product and Service Overview

- 1. Chatbot, Equipped with self-developed inference-based natural language engine
- 2. Speech synthesis technology Based entertainment content platform(coming in 2019)
- 3. Unstructured Big Data Analysis







Award@Fintech IP Competition by Seoul Metropolitan Government-Korea Intellectual Property Office in 2019, SW Growth Company 200 by National IT Industry Promotion Agency in 2019, Hi Seoul Brand Company by Seoul Metropolitan Government in 2019, Seoul Hidden champion(Work-Life Balance) by Seoul Metropolitan Government in 2019, T.I.P.S. Company by Ministry of SMEs and Startups in 2018, K-GLOBAL 300 by Ministry of Science and ICT in 2017









Business model	SaaS
	The global chatbot market is expected to expand to \$ 3.17 billion by 2021
Target market	/ The global big data and analytics market is expected to grow at an
	annual average of 11.9% by 2020, reaching \$ 210 billion in 2020.
	Korea International Cooperation Agency, Seoul Business Agency, Roche
	Korea, Seoul National University, Handong University, Chosen Media
Customers	Institute, MADAHM, Define, Platfarm, Mirae Asset Daewoo, Korea
	Export-Import Bank, Korea Development Bank, SBS, JTBC, Money Today
	News

Future plan

- Continued overseas market development in China and Southeast Asia
- Expanding the cooperative relationship with domestic and foreign entertainment companies and launching and strengthening services to expand the voice-based business model
- Expand natural language processing based solutions such as chatbots in public and universities, and continuously pursue projects for SMEs by participating in data voucher business.

Name	Name Xinapse Co., Ltd. E		In 2017	C.E.O	Dongwon Joo	
Phone +82 2-6052-5611		E-mail	welcome@xinap	se.ai		
Main Bus	iness Field	Customer relation managment, Entertainment Contents, Market research				
Main Pro	duct and Service	Chatbot, Intelligent contact center, K-POP Contents platform using A.l., Unstructured big data analytics				
Investmen	nt history	1.35 billion KRW(Core Asset Management, '18)(Krypton, '18)(Infobank, '18)				

YEGA YEGASOFT

www.yegasoft.com

☐ Company Identity

Security consulting and construction combined with Al(Artficial Intelligence) technology & Infrastructure constructrution for Al developers & companies

☐ Tech & Service Info

Core Al	☐ Visual Intelligence		☐ Sound Intelligence		☐ Language Intelligence
	☐ Data Driven / Modeling		☐ Data Processing		■ Hardware / Robotics
	☐ Reinforcement learning		☐ Autonomous driving		☐ AGI
	□ AEI		□XAI		■ Etc
Framework		PyCaffe, NXNet		Data type & secure	Not Public
Company's Core Al Explain					

Hardware infrastructure configuration optimized for AI technology development

Product and Service Overview

DB server composed of the most ideal GPU server for data analysis and deep learning, WAS and artificial intelligence developer PC configuration



- 2019 Korea Artificial Intelligence Association Innovation Award





Business model	HW, License			
Target market	It aims to standardize the AI-specific development infrastructure of			
	domestic AI developers.			
Customers	Ministry of Maritime Affairs and Fisheries, Ministry of Strategy and			
	Finance, Ministry of Culture, Sports and Tourism, Korea Maritime			
	Transportation Safety Corporation, Korea Transportation Safety			
	Corporation, KB Financial Group, Isu Group, KAIST, Seoul National			
	University, Sogang University, Incheon University, etc.			
Future plan				

As AI is advanced, it is aiming to standardize the operating system-based AI dedicated hardware and AI security solution.

Name	YEGA SOFT	Establishment	In 2014	C.E.O	Ryan Kim	
Phone +82 2.6462.3183		E-mail	ryan@yegasoft.com			
Main Business Field		Security/Infra				
Main Product and Service		Al Security Consulting / Al Infra				
Investment history		N/A				



AI STARTUPS REVOLUTIONIZE ALL INDUSTRIES

Issued 11. 2019

Publisher Korean Artificial Intelligence Association

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