

As of October 2023

TECHNOLOGY DATABASE

from KOREA and Partner Countries



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



UNIDO NETWORK OF INVESTMENT AND
TECHNOLOGY PROMOTION OFFICES
SEOUL, REPUBLIC OF KOREA



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2023

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UNIDO ITPO KOREA



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



UNIDO NETWORK OF INVESTMENT AND
TECHNOLOGY PROMOTION OFFICES
SEOUL, REPUBLIC OF KOREA

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UNIDO ITPO Korea August 2023 Technology Database
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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

Investment and Technology Promotion Office in Korea
(UNIDO ITPO KOREA)

UNIDO ITPO Korea
TECHNOLOGY DATABASE Webpage

www.unido-itpo.kr



국문



English



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION



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UNIDO in Brief

The United Nations Industrial Development Organization (UNIDO) is a specialized agency of the United Nations with a unique mandate to promote, dynamize and accelerate industrial development.

UNIDO's primary aim is to foster sustainable industrial development in developing countries while simultaneously aiding poverty reduction through its support for economic development. UNIDO leads activities in technology transfer, technology innovation, environmental sustainability, and reinforcement of manufacturing for developing countries.

UNIDO advances economic productivity and spearheads Inclusive and Sustainable Industrial Development (ISID) in developing countries through the strategic utilization of technology for developing countries. UNIDO promotes narrowing the gap in industrial development between advanced and developing countries through technological innovation, achieving more efficient and environmentally friendly industrial development.



UNIDO mandate

- UNIDO aims to provide industrial policy advisory services to developing countries and focuses on fostering ventures and small to medium-sized enterprises, facilitating local investment and technology transfer to enhance local employment and income levels.
- To strengthen the trade capacity of developing countries, UNIDO seeks to facilitate various forms of investment, such as Foreign Direct Investment (FDI), raw material imports, goods exports, and joint R&D projects, through the engagement of potential investors from advanced economies in the establishment of production facilities and other activities in the local economies of developing countries.
- In pursuit of sustainable industrial development involving both developing and developed countries, UNIDO conducts research and offers advisory services to effectively apply technology transfer and relevant technologies for the development and utilization of environmentally friendly energy in industrial activities. Simultaneously, UNIDO provides assistance to developing countries to ensure their compliance with international agreements related to the environment, helping them fulfill their obligations in this context.

UNIDO Network

UNIDO's headquarter is located in Vienna, Austria, with liaison offices in New York, Geneva, and Brussels. UNIDO provides support to 172 member states and executes projects and programs in approximately 120 of those countries. In 2023, it is running a total of 636 projects with a budget of 1.35 billion dollars. To amplify the impact of its technical cooperation and promote key issues related to industrial development, UNIDO collaborates with various development partners.

UNIDO ITPO Korea

UNIDO supports the achievement of sustainable economic growth in developing countries through technology transfer



Location and Contact

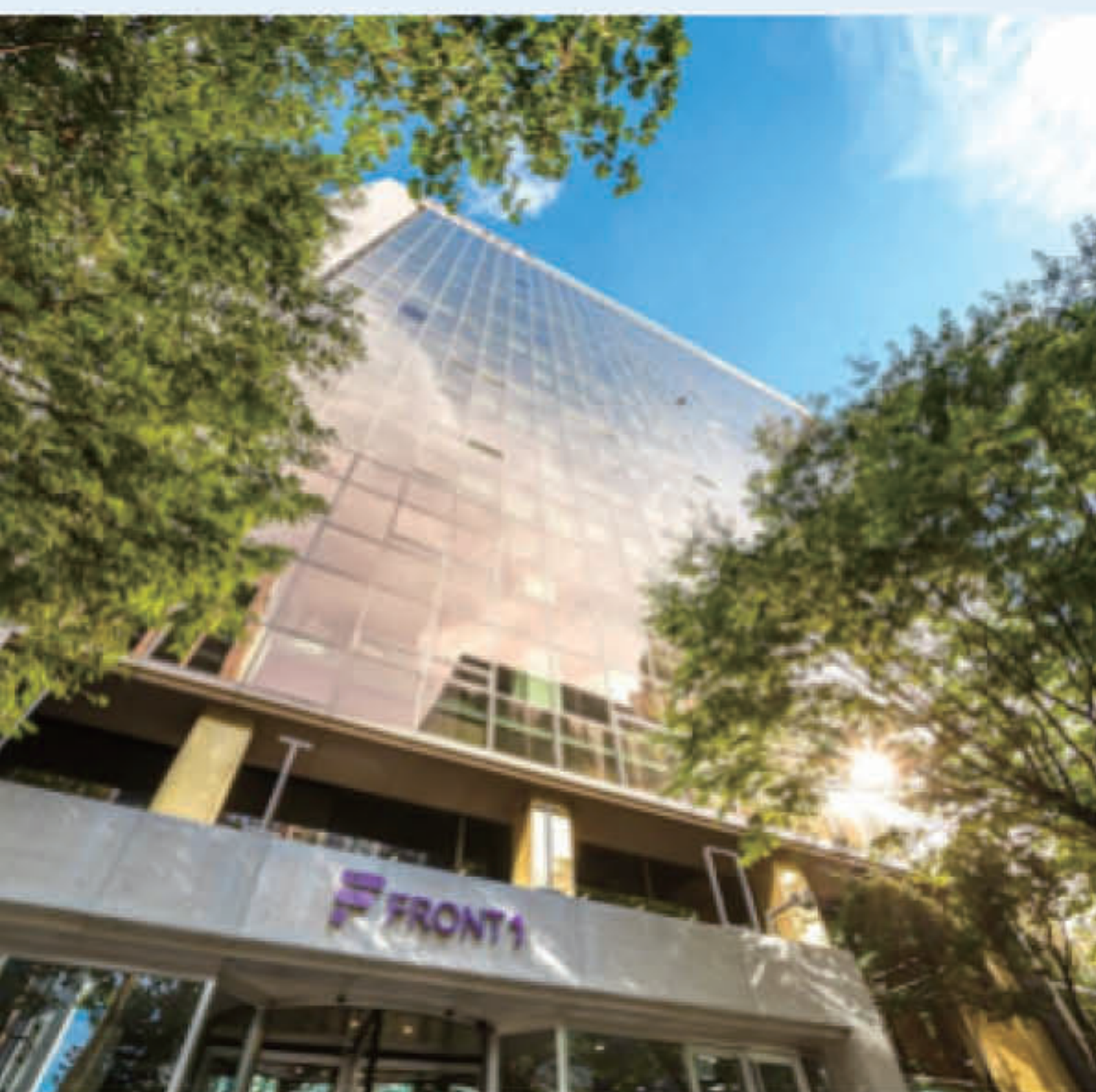
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Background

South Korea became a member of UNIDO in 1985, and in 1987, UNIDO established the UNIDO Investment and Technology Promotion Office (ITPO) Korea in Seoul, South Korea. At that time, the South Korean Ministry of Foreign Affairs and UNIDO agreed to share South Korea's economic development experience and knowledge through ITPO Korea, focusing on technology transfer and investment promotion. This approach can be seen as a central strategy of this office to support poverty reduction and sustainable economic development in developing and market-transitioning countries.

Mission

Utilizing UNIDO's Global Network, ITPO Korea provides advisory services on industrial development policies tailored to the specific circumstances of developing countries. The goal is to enhance trade capacity, generate employment, and promote green growth. Additionally, ITPO Korea encourages domestic investors, particularly small and medium-sized enterprises, to expand their businesses in developing countries by providing joint investment information and conducting feasibility studies.



TECHNOLOGY DATABASE from KOREA and PARTNER COUNTRIES

CONCEPTS

UNIDO ITPO Korea supports cooperation such as partnership building and technology transfer with developing countries by introducing cutting-edge and environmentally friendly technologies with excellent production efficiency from leading domestic and foreign companies. Through our own Technology Database (Technology Database, Tech DB), UNIDO ITPO Korea aims to widely promote excellent technologies of domestic and foreign institutions and companies wishing to expand businesses overseas, especially in developing countries, and ultimately contribute to the Inclusive and Sustainable Industrial Development (ISID) of the developing nations.

The Technology Database is regularly published and also uploaded to the website of UNIDO ITPO Korea. All stakeholders, including the 172 member states of UNIDO, governments, and private companies around the world, can easily access the desirable domestic and international technologies and relevant information. This platform greatly facilitates networking between domestic companies and foreign stakeholders and helps in future business advancements.

Companies wishing to register their technologies in the Technology Database of UNIDO ITPO Korea must submit a prescribed form to UNIDO ITPO Korea. The submitted forms undergo internal review processes before getting uploaded in the database.

Partner Institutions

UNIDO ITPO Korea cooperated with the Korea Technology and Information Promotion Agency for SMEs (TIPA) for fair and objective evaluation during the selection process. TIPA is a quasi-governmental agency in the Republic of Korea (ROK) that focuses on the support of new industries in the era of the Fourth Industrial Revolution through technological innovation, informatization, and dissemination and enhancement of smart factories for SMEs.

For this document, UNIDO ITPO Korea selected companies through verification utilizing the 'Data-Selected Technologies' of the TIPA.

REQUIREMENTS FOR REGISTRATION

Technologies will be reviewed and screened by ITPO Korea's experts based on the following criteria:

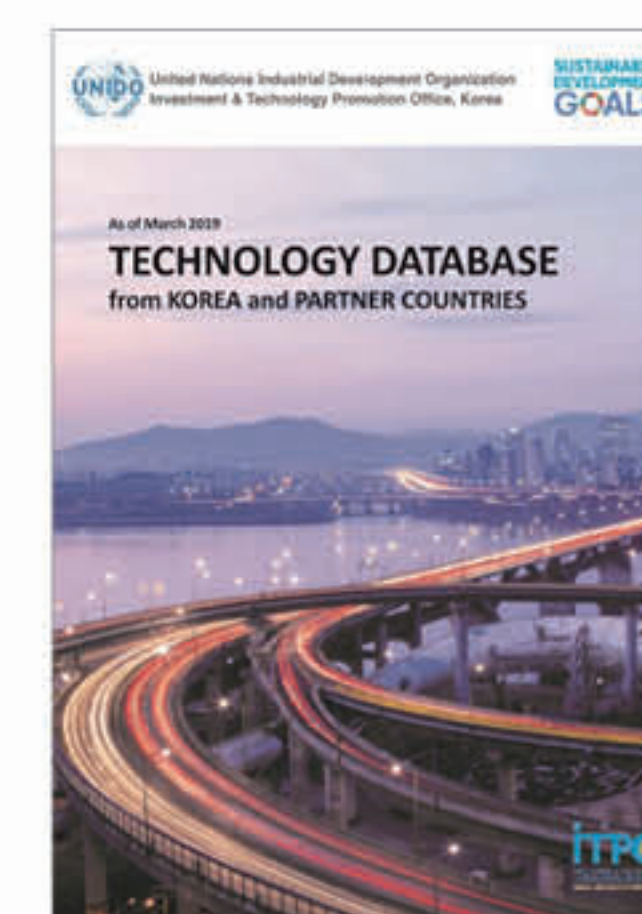
- Acceptance in developing countries
- Level of technology
- Sustainable Competitive Advantage (SCA)
- Compatibility with UNIDO's industrial development project

HOW TO REGISTER

Any company who wishes to register their technology, service, or product on ITPO Korea's website can contact us by emailing itpo.seoul@unido.org

DISCLAIMER

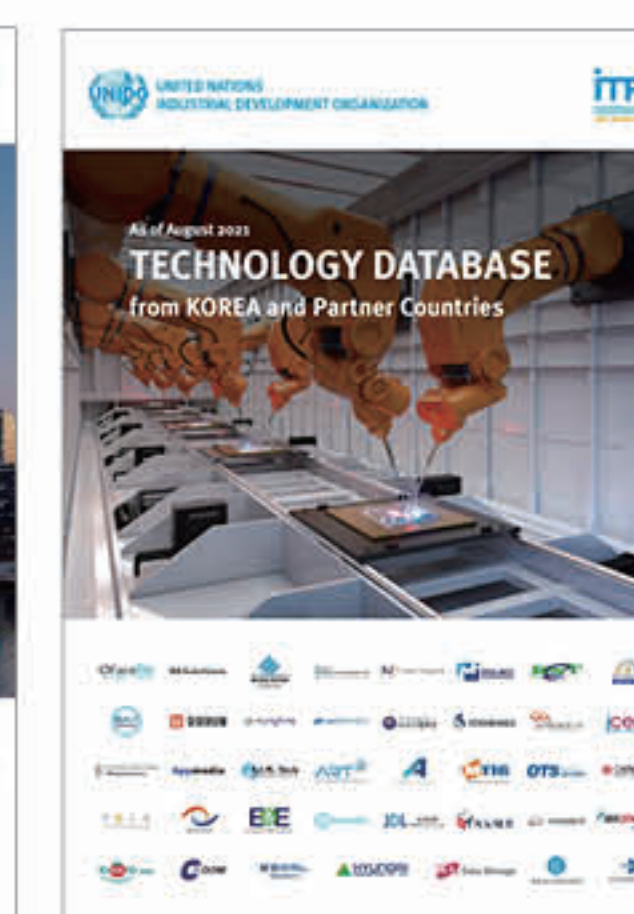
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Technology Database 2019



Technology Database 2020



Technology Database 2021

Technology Transfer for ISID

UNIDO ITPO Korea contributes to the reduction of development disparities between developed countries and developing countries and promotes inclusive growth through technology transfer.



Technology Database Category

Environment · Resource Management



- Water treatment
- Air treatment
- Environmentally friendly materials

Security



- Security
- Disaster & safety

Information and Communication



- Manufacture of electrical equipment
- Smart-care system
- Platform
- Data
- Fintech
- Bigdata & Solution

Agriculture, Forestry, and Fisheries



- Beekeeping
- Biomaterials
- Bacteria prevention
- Livestock software · Engineering · AI

Health Care, and Social Welfare



- AI diagnosis · Smart-care system
- Medical device
- Bigdata & solution
- Platform

Environment · Resource Management

Environment · Resource Management

Electrolyzers



Company

UniWin has developed and commercialized bipolar electrolytic devices for the first time in South Korea, backed by over 30 years of experience, expertise, and technology development. Additionally, the company has secured technology for the energy conversion of hydrogens produced from electrolyzers. UniWin offers services related to the energy conversion of by-product hydrogen from electrolytic devices, including production and supply of the devices, operation, and maintenance. Notably, their seawater electrolytic devices are vital for desalination projects using seawater, nuclear power generation, and marine plants, as they help control the growth of marine organisms like barnacles and seaweed that can interfere with seawater intake. Electrolytic device technology is also used in industrial sectors, such as water disinfection for drinking water and water treatment. UniWin is actively expanding its presence in the Middle East, primarily in Saudi Arabia, through business agreements, and participation in global projects, including those in Southeast Asian countries like Indonesia and Thailand. Domestically, UniWin serves major clients such as Hyundai Engineering, GS Construction, Daewoo Construction, DL E&C, and Samsung Engineering, with ambitions to enter the global market.

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Location | #804, JST Tower, 229, Seokjeong-ro, Michuhol-gu, Incheon, Republic of Korea

Technology & Product

Power plants, including those for desalination, nuclear, LNG terminals, marine, oil & gas plants, and petrochemical plants, require significant quantities of seawater for cooling and fire protection. To prevent marine organisms from attaching to the process systems, seawater is directly electrolyzed to produce sodium hypochlorite (NaOCl), a seawater disinfection system. This system safely and reliably manages the chlorine disinfection process in food, purification, water treatment, and cooling water applications. UniWin has achieved a prominent technological status as the global top five and is competing in the worldwide market.



Participation/Awards | Company introduction and technology presentation at SWA with an invitation from the Saudi Arabia SWCC (2023)

Interested countries | Saudi Arabia, UAE, Indonesia, Malaysia, Thailand, etc.

Photocatalytic HEPA Filter and Air Conditioning Products with Applied Technology



Company

Daram Engineering Co., Ltd. is a cleanroom engineering company specializing in the manufacturing of mechanical facilities, dehumidification equipment, temperature and humidity control systems, cleanroom facilities, and equipment. The company has grown in parallel with the semiconductor industry's development. Furthermore, Daram Engineering Co., Ltd. is expanding its business scope into the design and detailed design of mechanical facility systems, including HVAC and utility systems.

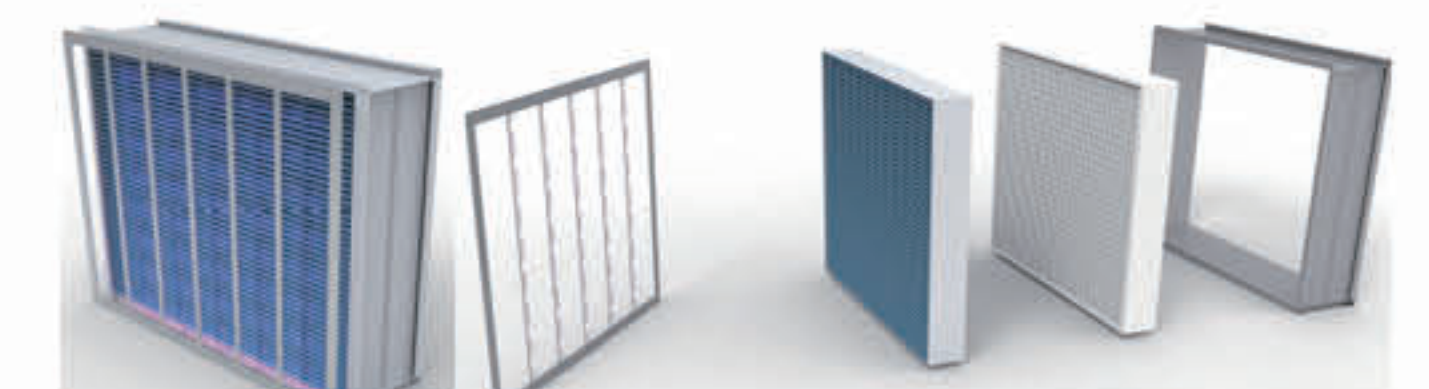
With the emergence of the 'Fourth Industrial Revolution,' there is a growing demand for industrial advancement and the acquisition of growth drivers in the field of building facilities. To achieve more systematic and efficient design and construction data integration and management, the adoption of BIM (Building Information Modeling) models is necessary. Daram Engineering Co., Ltd. aims to use data not only during the design and construction phases but throughout the building's entire lifecycle. Through BIM SERVICES, the company actively responds to changes in the engineering market, leveraging its accumulated expertise and know-how to ensure customer satisfaction.

Contact | +82) 70-4633-5780 **E-mail** | nhm4956@darameng.com

Location | Daram Engineering Co., 460 Ssangbong-ro, Ujeong-eup, Hwaseong, Gyeonggi-do, Republic of Korea

Technology & Product

Photocatalytic HEPA filters are composite filters created by combining industrial filter media with health filter materials. These filters are manufactured by coating health filter materials, using photocatalytic materials and inorganic binders, through an electrostatic, moderate-temperature heat treatment process. When equipped with a light module, these filters not only filter dust but also eliminate bacteria and even viruses smaller than dust particles. Harmful gases in the air are also decomposed in this process.



Participation/Awards | HVAC KOREA Mechanical Equipment Exhibition(2023) / HARFKO/ IFAT (2022)

Interested countries | Vienna, Austria

Environment · Resource Management

Filter Performance Evaluation System

Company

ART-plus, an R&D technology company, consists of experts in particle engineering. Specializing in the evaluation of fine dust reduction and control technology systems, the company aims to enhance the safety of products such as air filters and masks while also improving the quality competitiveness of manufacturers. Additionally, the company actively participates in the establishment of relevant domestic and international technical standards, complying with standards such as KS/ISO/EN/ASTM, and more.

Technology & Product

- Air Filter Performance Evaluation System: ART Plus designs and manufactures systems directly in accordance with the technical standards demanded by customers, both domestically and internationally (KS/ISO/ASTM/ASHRAE/EN/GB, etc.), and secures price competitiveness through domestic production of components. The company caters to customer requirements according to various 'test particles' (KCl, NaCl, DOP, Paraffin Oil) and 'test items' (PSE - Particle Size Efficiency, Pressure Loss, MERV - Minimum Efficiency Reporting Value, MPPS - Most Penetrating Particle Size).
- Mask Performance Evaluation System: Test methods for personal masks vary widely depending on their intended use. In addition to the "healthcare" (KF) standard specifications defined by the Ministry of Food and Drug Safety, ARTPLUS Plus supplies various testing equipment according to different standard specifications such as "medical," "industrial," and more (EN/ASTM/US MIL-M-36954C/16 CFR Part 1610, etc).



Intellectual Property/Certifications |

Patents No. 10-1671358, No. 10-1671011/ISO 9001, ISO 14001

Participation/Award |

National Sustainable Management Excellence Award from the Ministry of Foreign Affairs (2021), "Happiness Plus" Social Contribution Campaign Social Contribution Excellence Award from the Ministry of Health and Welfare (2022), 33rd Republic of Korea Small and Medium-sized Business Entrepreneur Awards - Model Company Presidential Commendation (2022)

Interested countries |

Taiwan, Malaysia, Singapore, Australia, the Philippines

Contact | +82) 31-635-4040 **E-mail** | a2z@art-plus.co.kr

Location | Ga-2nd floor, 195-62, Daepyeong-ro, Daewol-myeon, Icheon-si, Gyeonggi-do, Republic of Korea

ART-PLUS
<https://www.art-plus.co.kr/>

Cichlid+ / Starfish

Company

RedSubmarine Co., Ltd. was founded in 2016 as a sensor-based hybrid module development company. The company specializes in developing various forms of modules necessary for implementing the functionalities required in the IoT market. The company's distinguishing features include standardized formats and optimized ideas for addressing the demand, fostering close partnerships for component supply, and establishing a network of experts to realize these ideas. Furthermore, RedSubmarine Co., Ltd. has expanded its business by developing ESG-related technologies, including eco-friendly product (equipment) development such as oxygen generation devices.



Technology & Product

The Cichlid+ series consists of compact sensor modules designed for the monitoring of physiological signals. These miniaturized modules, employing a hybrid design that incorporates integrated circuits and passive components, eliminate the need for circuit development to drive the sensors and allow the circuit development to meet customer requirements. Moreover, the direct exposure of the sensor components enhances data reliability and enables a reduction in the final product's length. Starfish is an evolved compact module that includes various functions, including deep temperature measurement, surpassing Cichlid+ in terms of its capabilities.

Participation/Award |

Urban Regeneration Expo Excellent Exhibition Award (2021), Korea Startup Tech Show MIK Media Award (2019), Yongin City Electronics Parts Small Business Outstanding Award (2019), Nationwide ICT Smart Device Competition Corporate Division Excellent Award (2017)

Interested Countries | United States, Middle East, Israel, CIS countries, Singapore, Vietnam, Indonesia, etc

Contact | +82) 70-4169-7648

E-mail | redsubmarine@rsubmarine.com

Location | A-812, 184 Jungbu-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea

Red Submarine
<http://www.rsubmarine.com>

Environment · Resource Management

MarinePad

Company

MarinePad, which possesses world-leading eco-friendly marine material processing technology, has embarked on research and development with a mission to address health and environmental issues for babies and women. MarinePad has developed a commercial prototype using sea nano-fiber natural mesh to create an eco-friendly absorbent material that is safe for both the environment and the health of babies and women. This material is designed to completely replace chemical absorbents. MarinePad has obtained domestic patents and has submitted a PCT application. Furthermore, using the same material as a globally recognized organic sanitary pad brand, Natracare, with the introduction of sea-based absorbents, MarinePad offers superior absorption capabilities and competitive pricing. The company aims to expand its presence beyond Korea to enter the global market.



Technology & Product

MarinePad sanitary pads and diapers are the world's first products to use sea nano-fiber natural mesh absorbents. Conventional commercial diapers and sanitary pads typically contain microplastic polymer chemical absorbents, which have raised health concerns and safety controversies due to their negative impact. However, MarinePad, which avoids the use of microplastic absorbents (chemical components), stands out in terms of the following distinctive features: ❶ Composed entirely of natural ingredients, free from acrylic acid and other chemicals. ❷ Naturally biodegradable within 8 weeks. ❸ Delivers exceptional absorption capabilities by utilizing natural mesh's moisture storage mechanism.

These characteristics set MarinePad apart as an eco-friendly and safe choice for women's hygiene products.

Participation/Award |

Grand Prize in the Sustainable Growth Category at the Korea-Germany Chamber of Commerce and Industry's German Technology Innovation Competition (2017), Certification for Innovation in Marine and Fisheries Technology (2023-0010)

Contact | +82) 70-7607-3833 **E-mail** | contact@marinepad.kr

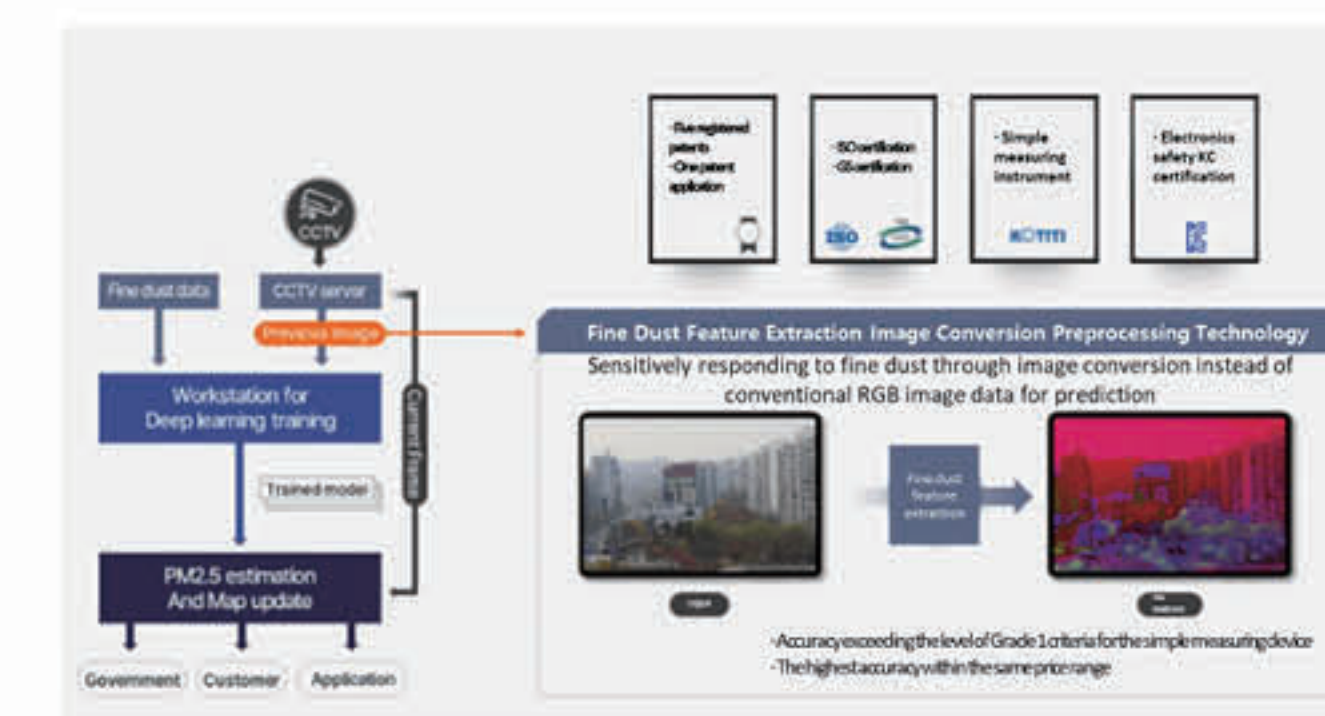
Location | 717 G-Valley Startup Cube, 120 Gasan Digital 1-ro, Geumcheon-gu, Seoul, Republic of Korea

MarinePad
<http://www.marinepad.kr/>

VISION PLUS

Company

'Bill (CEO Kang Bong-sul)' saw great potential in the young nation of 'Laos' from his university days and wanted to create better job opportunities. With a vision to benefit the local community, Bill entered the business world and founded Deep Visions. Deep Visions focuses on our shared responsibility to protect the environment. The company applies AI technology to benefit humanity, aiming to improve the quality of life and contribute to greater freedom for both the present and future generations.



Technology & Product

The world's first fine dust measurement solution, 'VisionPlus,' utilizes image processing and artificial intelligence technology to measure fine dust levels. It creates fine dust maps by using CCTV and unused mobile phone video data, and then employs AI analysis solutions on the server. Through image data and sensitive fine dust reactions, it predicts fine dust levels. Among the existing products in the same price range, it boasts the highest accuracy, earning certifications including the Ministry of Environment's Grade 1 simplified measuring device certification and ISO certification.

Participation/Award | KT&G Star Startup Campus Excellence Award (2023), Cultural Data Utilization Competition Grand Prize (2022)

Interested Countries | Southeast Asia, China

Contact | +82) 70-7537-0546

E-mail | bskang@deepvisions.co.kr

Location | 801 Seoul Forest IT Valley, 77 Seongsuil-ro, Seongdong-gu, Seoul, Republic of Korea

DEEPVISIONS
<http://www.deepvisions.co.kr/>

Security

Security

Smart Care System

TIPA **Cheil**
<https://www.cheilelec.com/>

Company

CHEIL ELECTRIC is a leading South Korean company specializing in electrical wiring devices with a history spanning over 68 years. Since its inception, the company has grown alongside the industrial development of South Korea. In the field of smart homes, CHEIL ELECTRIC has secured core technologies and is committed to establishing its unique platform, aiming to become a global leader in the smart home sector.

In response to the aging population and the increasing number of single-person households, CHEIL ELECTRIC has developed a "Smart Care System" that employs various sensors to protect the health and safety of individuals. Starting with Singapore, the company has plans to expand its exports to 10 countries in Southeast Asia.



Technology & Product

CHEIL ELECTRIC's "Smart Care System" consists of a data hub, motion detection sensors, door opening sensors, emergency call bells, light sensors, temperature and humidity sensors, fire detection sensors, respiration/heart rate radar sensors, and posture/fall radar sensors. What sets our product apart is that, unlike other products, it does not require the user to wear any additional devices like a smartwatch. Various sensors automatically detect events without causing discomfort to the subject.

Additionally, the system does not require contact-based sensors or explicit instructions, making it user-friendly in conjunction with companion robots and AI speakers. It employs non-contact heart rate/respiration and posture measurement sensors to autonomously detect any falls or deviations from the user's daily patterns, alerting caregivers and relevant authorities. This system offers active, automated responses, making it suitable for users with mobility issues.

Participation/Awards |

Vietnam Techfest Exhibition (2022), Vietnam Hanoi Expo, 2023 Singapore BuildTech Asia (2023)

Interested Countries | Vietnam

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Location | 555, Eulsukdo-daero, Sinpyeong-dong, Saha-gu, Busan, Republic of Korea

High Luminance Integrated Waterproof, Explosion-Proof, Bulletproof LED Semiconductor

ASTRONIX
<http://www.astronix.net>

Company

ASTRONIX Co., Ltd. has developed the world's first high-brightness integrated waterproof LED light source production core technology, establishing an integrated one-stop system that encompasses the development, production, and sales of special LED lighting products. In particular, ASTRONIX has been working towards supplying customized products to the disaster safety, defense, and private special industry sectors. As a global leading company in the LED lighting industry, the company aims to create a visionary business and generate high added value.

ASTRONIX's core technologies include the high-brightness integrated package component manufacturing technology for LED lighting sources and innovative technologies such as waterproofing, explosion-proofing, and non-current shielding technology incorporated into the LED lighting modules. These technologies are integrated into the "Vehicle Mobile Type LED Tower Lighting Vehicle," a unique disaster safety product. The company has exclusively supplied this product to the UN Procurement Division, contributing to the continuous growth and development of the next-generation lighting industry through ongoing research and development in the LED lighting field. Furthermore, ASTRONIX has created distinctive LED waterproof-explosion-proof-shockproof package component manufacturing technology and special automotive LED lighting product manufacturing core technology. These achievements have led to an exclusive supply in the global public procurement market, strengthening the company's position as one that always communicates with its customers.

Technology & Product

- High Brightness Integrated Waterproof, Explosion-proof, and Bulletproof LED Semiconductor: ASTRONIX Co., Ltd. has developed an innovative manufacturing process by stacking a metal PCB board and a flexible PCB board to create a parallel electrical circuit with surface finishing, allowing electrical current to flow. This technology integrates high-output 1-watt LED Die Chips into packages and applies a chemical substance mixture of liquid epoxy and fluorescent material (Pospo) to the surface of the LED Die Chips during the packaging molding process. As a result, the packaged LED Die Chips (components) are equipped with 100% waterproof, explosion-proof, and bulletproof functions.

- ASTRONIX Co., Ltd. has developed manufacturing technology for "LED Tower Lighting Vehicles" that combines LED lighting with special vehicles specialized for disaster safety equipment and national defense innovation equipment. ASTRONIX Co., Ltd. is an exclusive supplier to the United Nations Procurement Division and the U.S. Federal Procurement Division (SAM).

Intellectual Property/Certifications |

Patent No. 10-2018-003498, Patent No. 2016-090734 / ISO 14001, ISO 9001

Participation/Award |

Ministry of National Defense Innovation Excellence Award (2021), South Korea World-Class Product and Manufacturing Company (2022), Selection as a Global Procurement Company - G-PASS (2022), South Korea Disaster Safety Product Commercialization Company (2023)

Interested Countries | Vietnam, India, Pakistan, Indonesia, Saudi Arabia, UAE, USA, China, Central and South America, South Africa.

Contact | +82 63-471-8503 **E-mail |** astronix@korea.com
Location | 4th floor, Eco Building, 20, Jochonan 3-gil, Gunsan-si, Jeonbuk-do, Republic of Korea



Security

NZIA-NET

NZIA CONNECT
<https://www.nzia.kr/>

Company

NZIA CONNECT, a compound word, combines "NJIA (NZIA)," meaning "path" in Swahili, with "Connect," signifying the connection. It successfully provided TVWS payment communication for the world's first central bank digital currency, the Bahamas Central Bank's 'Sand Dollar' project. With the distinction of earning South Korea's first and only TVWS NET (New Excellent Technology) certification, it supplies TVWS communication networks to the Ministry of National Defense. Additionally, in collaboration with organizations like KOTRA, it offers TVWS solutions for wireless internet networks to underdeveloped countries such as Kenya, Ghana, Bahamas, and South Africa. Furthermore, it collaborates with local companies in the United States, Japan, Australia, and New Zealand to provide TVWS wireless internet and disaster networks.

Technology & Product

TVWS wireless communication can provide high-speed communication of 32 Mbps (CE standard) over distances of more than 20 kilometers, regardless of weather conditions or obstacles. It also supports 1:N communication and, with no frequency usage fees, offers the most cost-effective means of establishing an internet communication network. Leveraging these advantages, it has gained recognition for expanding internet access in underdeveloped countries and for serving as a disaster communication network in advanced nations.

NZIA-NET integrates TVWS communication equipment and operational platforms, allowing customers to establish and operate internet networks at the lowest cost and with ease.



Participation/Award | TechFest Vietnam(2022),
 VIETNAM EXPO,
 BuildTech Asia 2023 Singapore

Interested Countries | United States, Bahamas, Kenya, Ghana,
 Morocco, Rwanda, Myanmar, Turkey, etc.

Contact | +82) 02-851-3872 **Email** | kay@nzia.kr

Location | #1109, 293, Bupyeong-daero, Bupyeong-gu, Incheon,
 Republic of Korea

Information and Communication

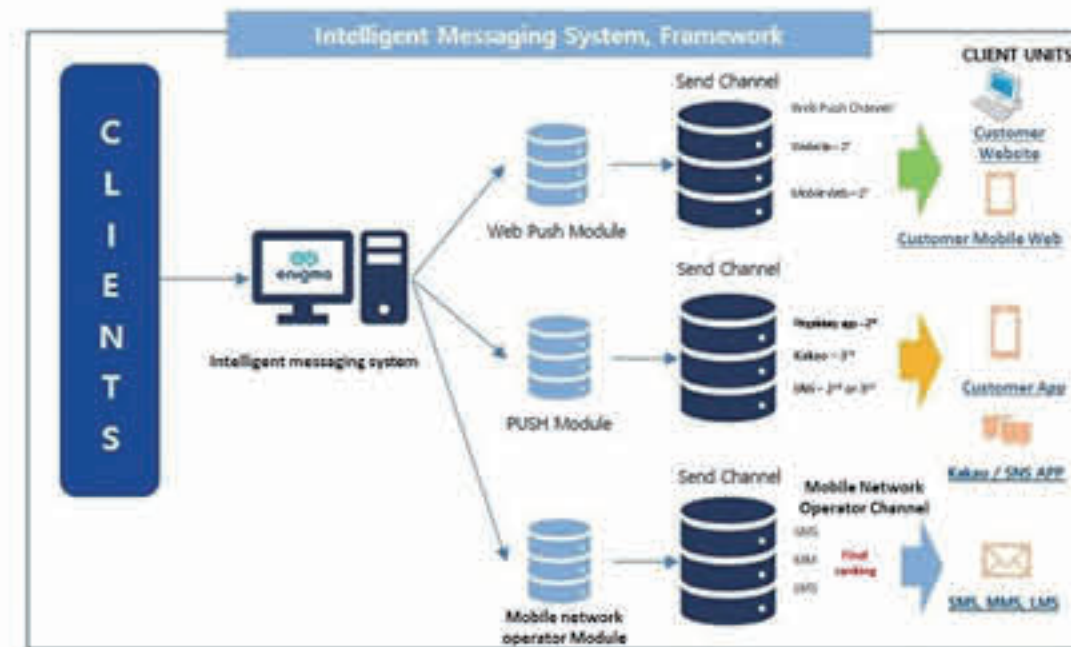
Information and Communication

Intelligent Messaging System

Company

Enigma is considered a next-generation messaging platform known for achieving significant cost savings, ranging from 30% to 60%, compared to conventional text messaging systems. It is recognized for enabling flawless transmission with an accuracy rate exceeding 99.9%. Utilizing a fourth-generation messaging approach, it employs a hybrid messaging method that integrates both circuit and packet transmission to deliver messages in the most efficient manner. The platform emphasizes the innovative concept of "Smart Intelligence Messaging Architecture" to revolutionize the way messages are conveyed.

Furthermore, it excels in personal data security and system stability, positioning itself as the world's leading intelligent messaging platform driving the global messaging market. Through the development of the next-generation intelligent messaging platform, Enigma is poised to meet the changing paradigms in corporate messaging and various marketing services.



Industrial Systems Integration Solution

Company

Digital transformation is an essential choice for companies to take an additional step towards the future industry.

Pondering upon the issues and solving problems together, Makerbox is growing in partnership with those heading for the future industry. Verified technical expertise obtained through continuous research and development is being utilized in various fields, including test automation, manufacturing and production, performance and limit testing, and research equipment automation, where system integration is required.



Technology & Product

The Intelligent Messaging Solution surpasses the limitations of traditional messaging platforms, offering an intelligent solution. This service comprises SaaS-based subscription messaging-exclusive smart platforms, allowing a diverse range of transmission channels through a hybrid combination of circuit and packet integration, leading to cost savings. It supports operational automation, data analysis, customer interaction, and deployment across customer channels as a comprehensive solution. This enables real-time analysis of customer reception and data aggregation, making it a valuable marketing tool.

In the future, it can be further expanded into a two-way messaging system with added machine learning capabilities, offering versatile B2C solutions. The core technology employed in the Intelligent Messaging Solution is based on patents held by Enigma. Enigma has completed patent applications and registrations for these core technologies in major countries, including South Korea, the United States, Japan, Singapore, Indonesia, Vietnam, the European Union, Malaysia, and India, contributing to the development of technology-poor nations.

Participation/Award

Winner of the South Korean Invention Patent Grand Prix (2017), Software Quality Certification for the Intelligent Messaging System (2019)

Interested Countries | United States, Japan, Southeast Asia

Contact | +82) 31-8039-7370 **E-mail** | under_ground@daum.net

Location | 527, Changup-ro, Sujeong-gu, Seongnam-si, Gyeonggi-do, Republic of Korea

MakerBox

<http://www.makerbox.kr/>

Technology & Product

The entire process of on-site system integration is carried out using in-house technology. The entire system is constructed based on field configuration and design, wiring, mechanical fabrication, and integrated control software development, including technical capabilities for data acquisition, measurement, and precision control. This enables tasks such as digital twins, process automation, data log management, repetitive testing, and extreme environmental monitoring in various areas of manufacturing, research and development fields.

Intellectual Property / Certification | Patent No. 10-1966542, Trademark No. 40-1369737

Participation/Award History

Control Overflow (2020), Carbon Neutral EXPO (2021), Korean Society of Mechanical Engineers Spring Academic Conference in Dynamics and Control Section (2023)

Interested Countries | Japan, Europe, North America, Central and South America, Southeast Asia, Middle East

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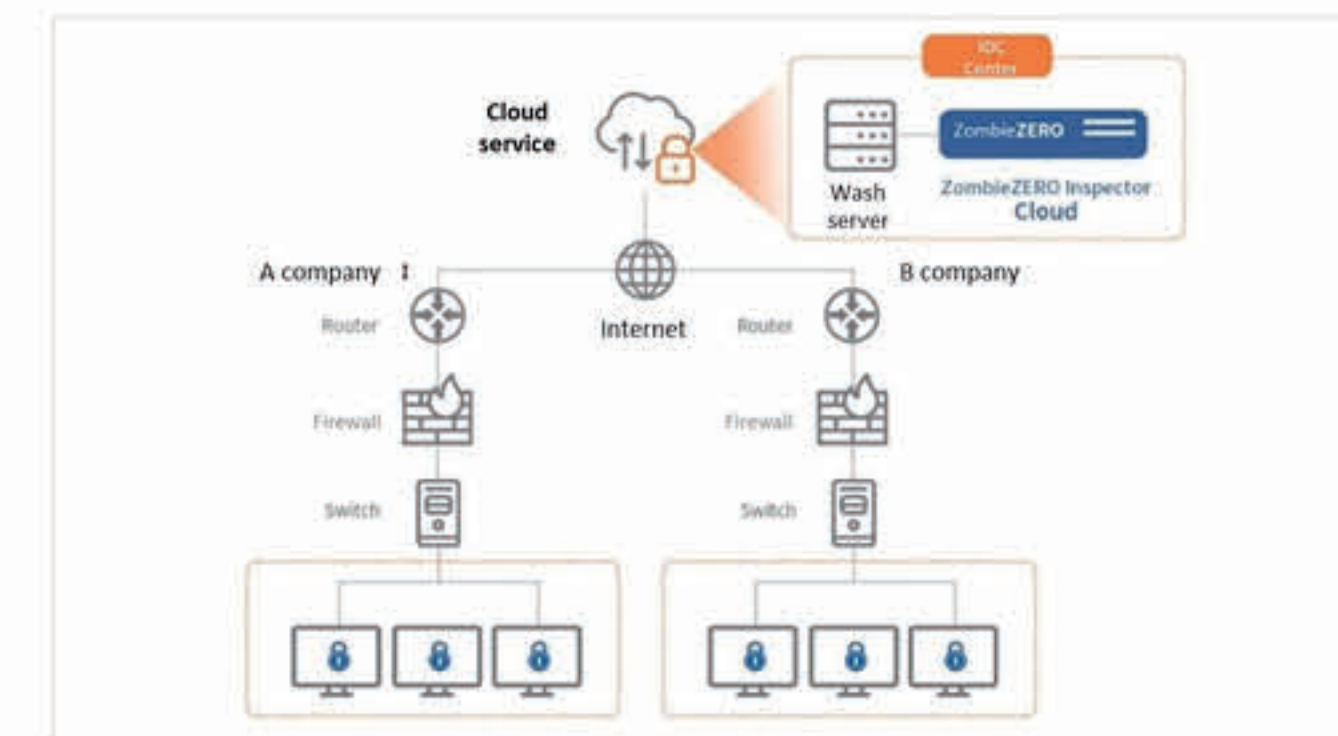
Location | 10th Floor, Research and Development Tower, 1013-1, Nuri Dream Square, 396 World Cup North Road, Mapo-gu, Seoul, Republic of Korea

Information and Communication

Cloud-based Subscription EDR Security Service

Company

NPcore offers the 'ZombieZero' series of APT/EDR security solutions, which detect, analyze, and respond to malicious code infiltrations through various channels using AI and behavior-based approaches. As a global expert company in the fields of malicious code detection, analysis, and response, NPcore actively conducts sales and marketing activities through various domestic and international distributors. Recently, the company has expanded into the cloud-based subscription EDR (Endpoint Detection & Response) security service sector, securing their position as a leading information security company in South Korea.



Technology & Product

ZombieZERO SECaaS is a cloud-based security service derived from ZombieZERO EDR. It offers a web-based purchase, installation, and management system that deploys agents in various user segments, such as PCs and servers. This solution transmits network packets generated within user segments to the cloud security server (the cloud version of ZombieZERO Inspector) to detect and block various malicious codes, including ransomware. It provides central management capabilities through a web-based interface, offering convenience and cost-effectiveness as it requires no hardware investment. ZombieZERO SECaaS seamlessly integrates ransomware and malicious code detection/blocking features from ZombieZERO EDR with data leakage prevention and traffic encryption-based Private Virtual Network (SSL VPN) features, ensuring protection against information leakage for enterprises.

Intellectual Property Rights

GS Certification, Innovative Product Certification, International CC Certification, ISO 9001 Certification

Participation/Award

Patent for 'Image-Based Malware Detection Method and Device and AI-Based Endpoint Threat Detection and Response System' (2023) Patent for 'Cloud-Based Virtualization Device, System, and Method for Malicious Activity Detection' (2023)

Interested Countries

Southeast Asia, Japan, Middle East, Africa, South America

Contact | +82) 2-1544-5317 **E-mail** | marketing@npcore.com

Location | #701, Geumgang Penterium IT Tower, 171, Dangsan-ro, Yeongdeungpo-gu, Seoul, Republic of Korea

NP CORE

www.npcore.com

LINK5 Platform

Company

Established in 1987, TELSTA is a specialist automation equipment manufacturer based on precision measurement and assembly technology. With 35 years of experience in equipment manufacturing, TELSTA has the capability to simultaneously build both hardware and software. By adding smart factory capabilities, TELSTA enables sustainable smart business solutions. Based on the self-developed artificial intelligence (AI) smart factory platform, LINK5, TELSTA has supported the establishment of smart factories for numerous small and medium-sized enterprises in South Korea. Additionally, TELSTA has been involved in projects such as the digitalization of Hyundai Motor's production lines and the execution of national AI smart factory projects.



Technology & Product

The LINK5 Platform is an artificial intelligence Smart Factory Platform based on T-ELSTA's 36 years of experience in building production lines (H/W) in various industries and expertise in constructing production execution systems (S/W). LINK5 is designed to support customers' Smart Business needs, focusing on quality, cost, and delivery management to enhance productivity. It offers a range of solutions that can provide increased productivity, improved quality reliability, enhanced operational efficiency, and cost savings, ultimately enabling flexible market responsiveness required in the Smart Business era. Through the LINK5 Platform, you can achieve improvements in productivity, quality reliability, operational efficiency, and cost reduction.

Interested Countries | Southeast Asia

Contact | +82) 31-646-4000 **E-mail** | telstar@telstar.kr

Location | 455-2, Hyungok-ri, Cheongbuk-myeon, Pyeongtaek-si, Gyeonggi-do, Republic of Korea

Telstar

<http://www.telstar.kr>

Information and Communication

TousFlux

Goldenplanet
https://www.goldenplanet.co.kr/

Company

GoldenPlanet is a digital transformation and big data analytics specialist with 14-years of experience. Leveraging years of experience and data integration technology, GoldenPlanet is shaping a truly data-driven world by connecting people, technology, and expertise. The company collects and accumulates all of the data generated within enterprise business processes in the cloud infrastructure. Simultaneously, GoldenPlanet utilizes big data analytics to extract meaningful data insights, enabling reinvestment for business growth.

To fulfill this role, GoldenPlanet possesses SaaS-based machine learning, deep learning artificial intelligence analysis technology, as well as PaaS-based big data analysis and processing capabilities. Additionally, as a partner of Google, GoldenPlanet builds infrastructure for Google Analytics (GA), Google Cloud Platform (GCP), and other solutions. The company also creates marketing cloud solutions to support enterprise marketing activities, collaborating with platforms like Salesforce and Oracle.



Technology & Product

TousFlux is a platform that enables marketing strategy execution based on big data. From market exploration to strategy implementation, TousFlux assists in generating business performance through systematic data collection and analysis.

TousFlux efficiently collects and refines various data within enterprises, utilizing its core technologies in big data collection, processing, statistics, and computer vision-based analysis and monitoring. It provides analysis and strategy execution services that encompass the entire customer journey, from the moment a customer contemplates a purchase to their post-purchase experience.

TousFlux offers optimal solutions that enable real-time detection of market trends and successful marketing strategy execution across various industries such as finance, retail, public sector, manufacturing, and services.

Participation/Award |

Prime Minister's Commendation (2022), Minister of Science, ICT, and Future Planning Award (2022), Commissioner of the Korean Intellectual Property Office Commendation (2022), Excellent Utilization of Big Data Center by Enterprises (2018), Innovative Small and Medium-Sized Enterprise in Technology (2019)

Contact | +82) 2-597-1811 **E-mail** | gp@goldenplanet.co.kr
Location | 535, Eonju-ro, Gangnam-gu, Golden Planet Tower, Seoul, Republic of Korea

Integrated Access and Account Management Solution HIWARE

Netand
https://www.netand.co.kr/

Company

Since its founding in 2007, Netand has been a leading company in the field of Integrated Access and Account Management (IAM) with over 15 years of research, development and the most extensive industry experience in IT infrastructure environments. With a dedicated team of IAM experts, which constitutes 75% of the total workforce, the company is leading in setting IAM technology standards in South Korea. To enable innovative solutions and services, Netand independently operates an IT research institute and a strategy room, investing over 30% of its annual revenue in research and development. Its flagship product, HIWARE, has been supplied to over 700 customers in both domestic and international markets, with a track record of being the best-selling access control system in the procurement field for eight consecutive years. Recently, the company has expanded its presence by establishing a branch in Singapore, serving as a launchpad for rapid international market expansion, particularly in the Southeast Asia region.

Intellectual Property and Certification |

CC Certification, GS Certification, ISO/IEC 27001:2013

Participation and Award |

Recognized as one of the "Top 5 Cybersecurity Companies to Watch in 2022," APAC Digital Account Management Top Vendor in 2022.

Interested Countries | Vietnam, Laos, Cambodia, Philippines, Indonesia, Thailand, Singapore, Malaysia.

Contact | +82) 2-2661-1410 **E-mail** | info@netand.co.kr
Location | 10th Floor, Hanam Building, 25 Uisadang-daero 1-gil, Yeongdeungpo-gu, Seoul, Republic of Korea

Technology & Product

HIWARE is Netand's flagship product, representing the pinnacle of its technical expertise, drawing upon the diverse deployment experiences at both domestic and international levels. It is an Integrated Access and Account Management (IAM) solution consisting of seven individual products: System Access Control, System Account Management, DB Access Control, DB Account Management, AD Account Management, CCTV Password Management, and Mobile OTP. This solution allows comprehensive control and management of all user access to IT infrastructure operation systems based on their permissions. Even users with permissions undergo a rigorous authentication process for all access operations, enabling the realization of zero-trust security. Furthermore, it consolidates dispersed accounts across various devices for unified and automated management. Through integration with human resources systems, it automatically deletes or locks former or dormant accounts, eliminating security vulnerabilities stemming from unauthorized account hijacking and blocking various social engineering attacks. HIWARE's seven products can be selectively deployed based on specific needs. When two or more products are integrated, they operate as a single, powerful solution under the same policies and processes within a unified user interface, maximizing security and operational efficiency.



Information and Communication

A IoT-based Facility Safety Management System

ASINCNT
http://www.safe-signal.com

Company

Asin (亞信) is a civil engineering IoT specialist company founded in 2013, with "Trust" as the foremost corporate value. Asin C&T provides solutions in various areas of civil engineering, encompassing design, underground safety impact assessment, structural safety diagnostics, instrumentation management, and the research and development of smart IoT products. Despite domestic and international environmental challenges, the company continues to engage in innovation and takes on new challenges.

Asin C&T has played a pivotal role in the advancement of smart construction technology and civil engineering through the development of professional IoT devices for facility management and the successful execution of design projects. Leveraging their accumulated expertise and know-how, the company strives to showcase its exceptional technical capacities in civil engineering services to the global community. In the era of the Fourth Industrial Revolution, they are working to establish an ICT monitoring system and infrastructure suitable for creating valuable projects for future societies. The company is committed to always giving its best.



Technology & Product

The digital-based facility safety management system is an AI+IoT integrated monitoring system that addresses the vulnerabilities of conventional IoT-based monitoring technology, including: ① Degraded Data Reliability ② Impaired Communication Performance ③ Device Control Impairment ④ Data Security Vulnerabilities ⑤ Machine Learning-Based Prediction ⑥ Integration of Artificial Intelligence Technology

This system provides intelligent services for the safety status of digital-based facilities. It allows precise analysis of risk zones, as well as vulnerable areas and timeframes. Through risk assessment based on data-analysis, the system enables automatic and precise measurements and alert services when risks are detected.

Utilization Solutions: ① Facility Safety Management ② Disaster and Emergency Safety Management ③ Aging or High-Risk Facility Safety Management ④ Building Safety Management ⑤ Industrial Site Safety Management

Intellectual Property Rights |

Registered patents, including Patent No. 10-2191008, and 9 other patents. GS Certification, KC Certification.

Participation/Awards |

Awarded the Encouragement Prize for Interdepartmental Disaster Safety Research and Development Achievement in 2022.(2022)

Interested Countries | Laos, Myanmar, Indonesia, Vietnam

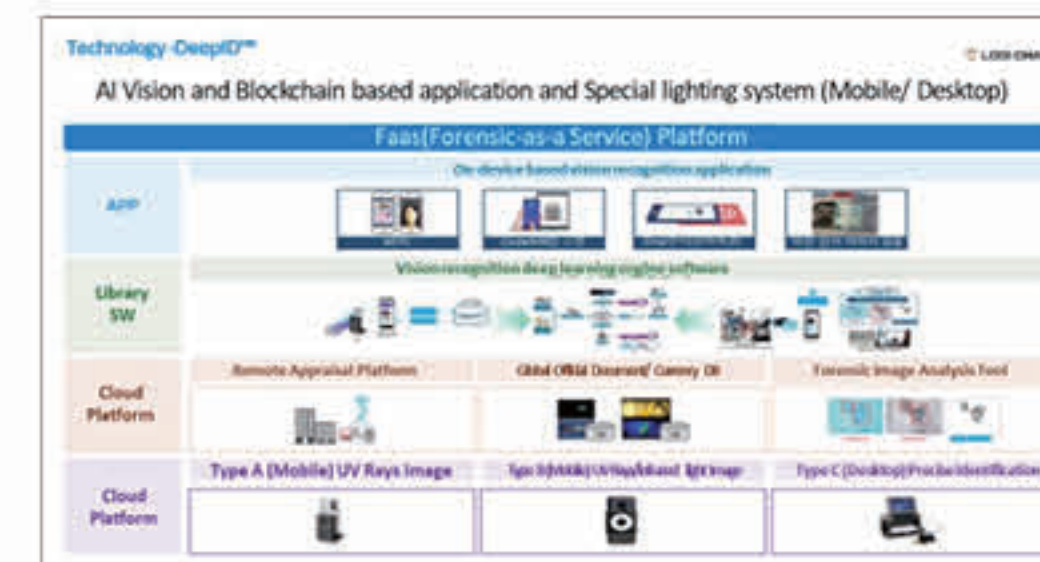
Contact | +82) 31-421-2583 **E-mail** | asin2583@hanmail.net
Location | 3rd Floor, Asin Building, 19, Bongujae-ro 175beon-gil, Siheung-si, Gyeonggi-do, Republic of Korea

DeepID

LOGI CHAIN
https://deep-id.io

Company

Established in 2020, LogiChain carries out innovations in the field of digital forensic enhancement and public document reading solutions using multi-spectrum optical technology. LogiChain's Deep ID platform is based on DNA (Data-Network-AI) technology, which verifies physical objects and shares inspection results using a blockchain-based platform, detecting tampering in the physical distribution process. LogiChain is a specialized company in image forensics technology contributing to social safety and reliability in the public and financial sectors, providing a Forensic-as-a-Service (FaaS) platform.



Technology & Product

DeepID Mobile: DeepID Mobile is the solution to rapidly preserve evidence images from crime scenes and distinguish counterfeit identification documents that are difficult to discern with the naked eye. It uses special lighting and cameras to capture both visible and non-visible areas. The captured images undergo digital forensics analysis using a dedicated AI vision analysis tool, and the digital inspection results can be viewed through a dedicated application.

DeepID Desktop: DeepID Desktop addresses the authenticity of counterfeit banknotes, official document seals, and other elements that are hard to identify visually. It reads parts that are not visible to the naked eye using optical zoom cameras and LCD technology. By integrating with the FaaS platform, it provides remote and contactless authentication services.

DeepID eKYC: Through a dedicated application for comparing the photo on an ID with the actual captured face and intuitive interpretation of global official documents, DeepID eKYC enables easy identification of key information and verification. Additionally, it offers a database for visual identification methods, making it accessible for non-experts to detect tampering easily.

Participation/Awards |

Winner of the Non-face-to-face Service Information Security Hackathon (2020), Winner of the Defense Technology Utilization Competition (2022), and Recipient of the Excellence Award at the Blockchain/Fintech-based ESG Service Competition (2023).

Interested Countries |

Vietnam, the Philippines, Bangladesh, Mongolia, Ukraine, and Japan

Contact | +82) 2 458 7321 **Email** | ken@logichain.kr
Location | 80-67 Gwahak-ro, Yuseong-gu, Daejeon, Republic of Korea / 70 Haneulgil, Gangseo-gu, Seoul, Republic of Korea

Information and Communication

Hyperspectral imaging technology

Geostory

<https://www.geostory.co.kr/main/main.html>

Company

GeoStory Co., Ltd. is a leading young company in the geospatial industry, dedicated to enhancing the quality of life by compiling all spatial information, including the sky, land, and sea, within our daily lives. The geospatial industry is a critical field in the era of the Fourth Industrial Revolution, serving as an indispensable platform. GeoStory Co., Ltd., with its latest technological capacities, brings together passionate and motivated young individuals to tackle this vital sector.

Founded in 2012, the company has consistently strived and achieved the top growth rate in the geospatial industry. In recognition of its efforts, in 2018, the company was honored with the Sektap Industrial Medal in the Geospatial Development Merit Awards.



Technology & Product

Hyperspectral imaging technology allows the obtaining of highly segmented spectral information, enabling easy identification of specific targets. The spectrum information extends beyond the visible spectrum into the infrared range, encompassing characteristics of the subject such as color, chemical composition, temperature, and more. This technology is employed for classification, analysis, and detection in various fields, including agriculture, forestry, environmental science, marine science, water quality and resources, geology, cultural heritage, and defense.

Participation/Award |

Management Innovation-oriented Small and Medium-sized Enterprise Certification (2017).

Interested Countries | United States

Contact | +82) 10-4554-5197 Email | tonyjang@geostory.co.kr

Location | 406-408 (Deungchon-dong, Gangseo IT Valley) 82, Hwagok-ro 68-gil, Gangseo-gu, Seoul, Republic of Korea

Integrated Email Security Solution for Sending and Receiving - Mail Inspector Platform

KIWONTECH

www.kiwontech.com

Company

KiwonTech, the company that established global email security standards at the ITU, began as the first email security company in South Korea in 2019. It was listed in the Gartner report, and this recognition continued in 2021 and 2023. KiwonTech provides tailored email security solutions in more than four countries. It assists each nation in commercializing email security standard solutions and offers support for global email security standardization, ranging from methods to diagnose email security to standard technical education worldwide.

Certification |

ITU International Standard Development' Security requirements and countermeasures for targeted email attacks'(2023), Gartner 'Vendor Identification for Email Security' (2023, 2021), etc.

Participation/Awards |

Participation in Korea ICT Expo in Japan (2023), Participation in Oman ICT International Cyber Security (2022), Participation in Vietnam Vnetwork and Cybersecurity Exhibition (2022), Participation in World IT Show (2021)

Interested Countries |

Japan, Vietnam, Oman, Indonesia, Singapore, United States

Contact | +82) 10-4183-5574

Email | kevinkim@mailinspectplatform.com

Location | 509, 5th Floor, EnC Venture Dream Tower 5th, 53, Digital-ro 31-gil, Guro-gu, Seoul, Republic of Korea

Technology & Product

Adhering to all global standards set by ITU-T, KiwonTech's system utilizes machine learning and AI to combat targeted email hacking, specifically social engineering-based attacks. It continuously learns information such as headers, senders, routing, IP addresses, DNS, and domains from received emails in real-time based on accumulated training data. It also distinguishes between legitimate senders and suspicious ones.

Its system combines signature-based static inspection with in-house-developed virtual space technology for behavior-based dynamic inspection, enabling the detection of novel malicious codes that may not be recognized by conventional antivirus software in email attachments and URLs.

Furthermore, the integrated management technology, including encryption, delivery cancellation, and delivery delay, covers the entire email lifecycle from sending to receipt, preventing information leakage and misdelivery incidents, for both intentional and accidental cases. It also provides a secondary response function for email security by offering account-specific email security diagnostics based on international standards and automatically blocking suspicious activity when hacking attempts are anticipated during email transmission.



Information and Communication

Myren

Myren

<https://myren.ai/>

Company

Myren is a safety brand that combines "My" and "Siren" as a mobility safety solution. It provides guidance on unexpected situations and how to respond to accidents.

Myren is a startup company that provides an accident reporting solution, enabling users to report traffic accidents in just one second and connect with emergency rescue agencies, ensuring that the reporter can be rescued within the golden time. Myren has launched innovative products and services to provide a one-stop solution for accident-related mobility safety.

My own siren

Myren

Myren is a safety brand that combines "My" and "Siren". We will guide you on the unexpected situation and how to deal with the accident.



Technology & Product

Through real-time accident detection, Myren app allows users to activate and deactivate real-time accident detection mode. Users can select one of the following modes: car, bicycle, wheelchair, pedestrian, kick scooter, elderly, or disabled. In the event of an accident, a 30-second countdown begins when the accident is detected. If there is no response within 30 seconds, an automatic report is initiated. Information about the accident, including the reporting party, accident type, and the accident time, is instantly transmitted to pre-designated emergency agencies and guardians in just one second.

The app also provides guidance on five response procedures in the event of a traffic accident, including secondary accident prevention guidelines, first aid for the injured, and guidelines for capturing the accident scene. Users can view their accident report history through the reporting history feature.

Interested Countries | Germany, United States, Japan, Southeast Asia

Contact | +82) 10-2830-3657 Email | ceo@myren.kr

Location | 412 Green Startup Town, Wachon-dong, 32, Cheonancheon 4-gil, Cheonan-si, Chungcheongnam-do, Republic of Korea

Real-time MARC Solution

Libertree

<http://www.libertree.co.kr/>

Company

Libertree Co., Ltd. provides core E-CIP content for library information services, lecture (research) support content, book curation, and Real-time MARC Solution. Utilizing the expertise accumulated through the E-CIP content service, Libertree has developed the Real-time MARC Solution, and the core technology was registered as Patent No. 10-2015089 in 2019. In 2022, Patent No. 2351264 was registered for the "Personalized New Book Information Delivery Method and System," enabling users to receive only the essential information from the latest publications. Furthermore, based on Patent No. 10-2128858, "Blockchain-based Library Information Service Platform Construction System and Method," Libertree is developing the world's first new library information service. Libertree's content and solutions are gaining recognition internationally, and the company is preparing for expansion into the advanced countries. Libertree aims to develop new library information services and systems in the era of the Fourth Industrial Revolution, contributing to the competitiveness and growth of library information services in South Korea.

Technology & Product

The Real-time MARC Solution is an international network system for exchanging bibliographic information. Since the 1970s, libraries worldwide have been striving to provide real-time MARC information exchange, and Libertree Co., Ltd. has successfully addressed this, leading to its registration of a patent. It is a platform that offers real-time MARC information tailored to each library, including the latest domestic and international publications that were released today. Additionally, it provides not only MARC but also MARC XML and MODS formats.



Participation/Awards |

Participation in World IT Show (2023), Dubai GITEX, and NORTH STAR DUBAI exhibitions (2022)

Interested Countries | Japan, China, Europe

Contact | +82) 70-5067-0358 Email | archo@libertree.co.kr

Location | # 304, Gwangju Center for Creative Economy & Innovation, 12, Gyeongyeol-ro 17beon-gil, Seo-gu, Gwangju, Republic of Korea

Information and Communication

Rider Log

Company

A company originated from LG Display's internal venture, "Star-Pickers" has been continuously researching motion sensor technology, which it leverages for data collection and analysis. Currently, the company uses AI technology to analyze motion data collected in real-time, enabling us to detect the movements of various objects in real-time and predict the likelihood of future events. The company provides services such as mobility safety management and fintech-integrated service called "RiderLog." Additionally, Star-Pickers offers smart factory services for predicting equipment malfunctions and lifespans. Through the combination of motion and artificial intelligence, the company is consistently growing and innovating.



Star-Pickers

<https://star-pickers.com/>

Technology & Product

"RiderLog" is a safety management service designed for micro-mobility users. Micro-mobility refers to various forms of transportation, such as motorcycles, bicycles, electric scooters, and electric wheelchairs, which are often more vulnerable to accidents and have a higher fatality rate compared to automobile accidents. RiderLog uses AI for automatic accident detection, analysis of driving habits, accident reconstruction, and other methods to enhance safety management for these users.

Based on a user's driving habits, RiderLog can predict the likelihood of future accidents, encouraging safe driving practices. Safe drivers can enjoy benefits like insurance discounts, as well as financial perks such as loans and specialized credit cards. Furthermore, RiderLog offers additional advantages, including discounts on fuel and maintenance, as well as convenience store discounts, to promote safe driving habits among users.

Participation/Award |

Excellence Award at the 12th Youth Entrepreneurship Competition

Interested Countries | Southeast Asia, North America, Europe, etc.

Contact | +82) 70-4415-2662 **Email |** support@star-pickers.com

Location | (Jayeola, near Konkuk University Station) 820, 8th Floor, 87 Neungdong-ro, Gwangjin-gu, Seoul, Republic of Korea

Conversational AI and AI Automation Platform (Mind Expression)

Company

Mind AI possesses its proprietary artificial intelligence technology that can think logically like a human, and explain the reasoning behind its thought processes and outcomes transparently. Recognized globally for its potential and holding international patents, the company's value (Pre-Series A) is estimated at approximately 90 billion KRW. Among existing startups worldwide, Mind AI is considered to have the greatest potential. With a mission to spread precise and transparent AI that everyone can easily use, the company adopts an experimental and challenging approach to create a unique AI brain.

MindAI

<https://mind.ai>

Technology & Product

Mind Expression is an AI & AI Logic Process AlaaS with an inference engine. It comes equipped with its proprietary AI inference engine, allowing developers to easily create inference-based AI. Furthermore, it seamlessly integrates with other services/products via APIs. In contrast to machine learning, it provides transparency regarding why the AI behaves in a certain way, enabling easy and rapid performance improvements. It educates AI similar to teaching knowledge to a person, making it reliable for business applications, which is why numerous companies worldwide are confidently using the product.

Intellectual Property Rights |

Patent: KR 10-2366282, Patent: US 11,520,814 B2,

Patent: TH 2303000812

Participation / Awards |

Asia/Australia AI Division Winner (2020), Silicon Valley TICON AI Division

Winner (2021), Minister of Science and ICT R&D Award (2021), Minister

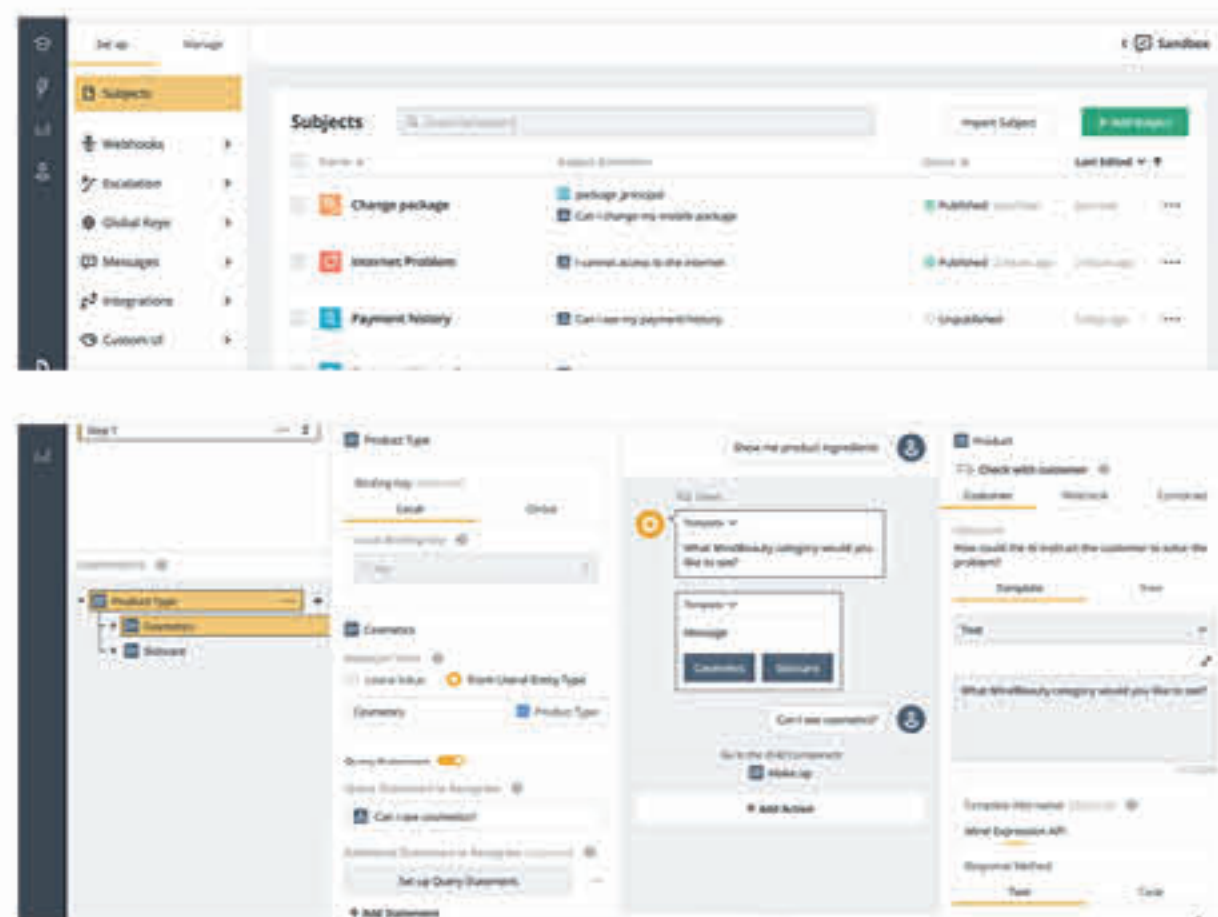
of SMEs and Startups Award for Technology Innovation Management

Division (2023)

Interested countries | United States, Europe, Middle East (UAE), India, Southeast Asia

Contact | +82) 70-8622-8711 **E-mail |** info@mind.ai

Location | 3rd Floor, 65 Myeongdong-gil, Jung-gu, Republic of Korea

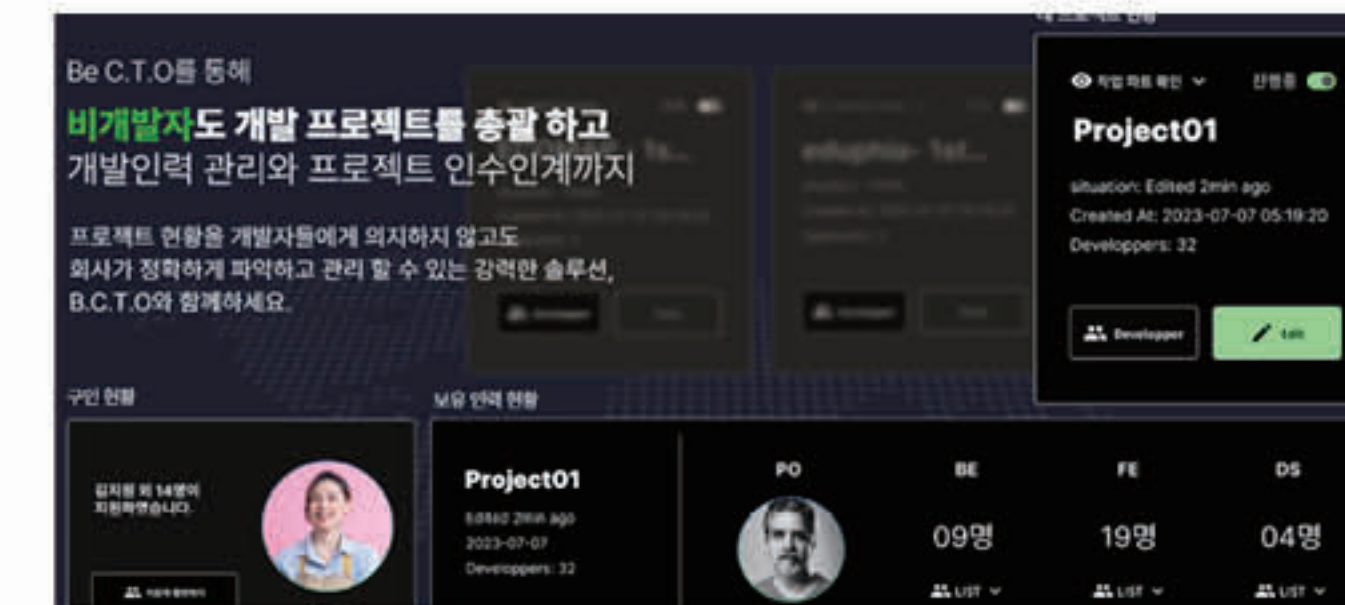


Information and Communication

BCTO

Company

EXTORY is a technology startup established in February 10, 2023. The name EXTORY is a combination of "Experience" and "History," signifying the idea of individuals writing their own experiences as their unique history. It aims to build the career of each developer solely through development experiences.



Technology & Product

BCTO is a service that allows individuals, even those without development knowledge, to perform the role of a CTO. It also serves as a career-building service for developers, helping them advance towards becoming a CTO, also known as BeCTO. BCTO assists the CTO in assembling a development team with suitable developers and provides objective quantitative metrics to make development matters easily understandable to non-developers.

To deliver this service, it extracts proven development information from development content and processes it. Through historical data, it quickly and easily reads a candidate's history, helping in recruitment. It offers a dashboard that provides quantifiable development change metrics for organized development teams, allowing a clear overview of who, when, and what is being developed.

As a result, it enables remote hiring and management of developers, offering opportunities for skilled developers from developing countries to participate in advanced business development in developed nations.

Participation/Award |

Advanced to the finals of Decamp D-Day (2023), participated in the Silicon Valley Investment Presentation and Anaheim Han Sangdae Competition (2023)

Interested Countries | United States, Singapore, Vietnam, Laos, Australia, European Union (EU)

Contact | +82) 10-2905-1175 **E-mail |** admin@extory.com

Location | 5th Floor, Extory, 551 Seolleung-ro, Gangnam-gu, Seoul, Republic of Korea

AI Logistics Forwarding Platform, CocoTruck

Company

AI Deep Tech startup, CocoNutSailo Co., Ltd., is an in-house startup of Hyundai Motor Group, founded in its early stages to innovate and address various challenges within the market, including the logistics and cargo industry. It aims to establish a more efficient and evolved mobility ecosystem based on artificial intelligence and big data technology. With its proprietary artificial intelligence (AI) and big data technology, it aims to provide optimized solutions and lead the digital transformation of the logistics and cargo market.



Technology & Product

"CocoTruck," an AI-based solution for hassle-free freight transportation, addresses challenges within the logistics flow. It enables easy transportation requests for anyone while providing a clear view of the logistics flow. With information on the trucks and advanced algorithms for optimal route guidance and consolidation, it helps companies reduce transportation costs. This platform connects all players in the logistics market, making it easy and fast for anyone to request freight transportation.

Key features include :▲ AI-driven automatic pricing proposals▲ Dynamic route optimization algorithms▲ Real-time location-based smart consolidation systems

These in-house technological capabilities improve the quality of logistics services. Shippers can easily receive freight through the "Shipper App" by entering transportation information instead of making phone calls or sending emails. Carriers, using the "Carrier SaaS" platform, can visualize the freight transportation process and efficiently manage inefficient work methods. Drivers can use the "Driver App" to manage transportation history, allocate vehicles, and receive cargo. They can also handle functions such as electronic signatures and route calculation, enabling more efficient freight transportation.

Participation/Awards |

South Korea Digital Innovation Award, Commendation by the Minister of

Science, ICT, and Future Planning (2022), Red Dot Design Award Winner

(2022), iF Design Award Winner (2022), Geneva International Invention

Award, Gold Medal (2021)

Interested Countries | Southeast Asia, Central and South America

Contact | +82) 02-564-0309 **Email |** contact@coconutsilo.com

Location | 9th Floor, YooHan Tower, 19 Seongsui-ro, Seongdong-gu, Seoul, Republic of Korea

EXTORY

<http://extory.co>

Coconutsilo

<https://www.coconutsilo.com>

Agriculture, Forestry, and Fisheries

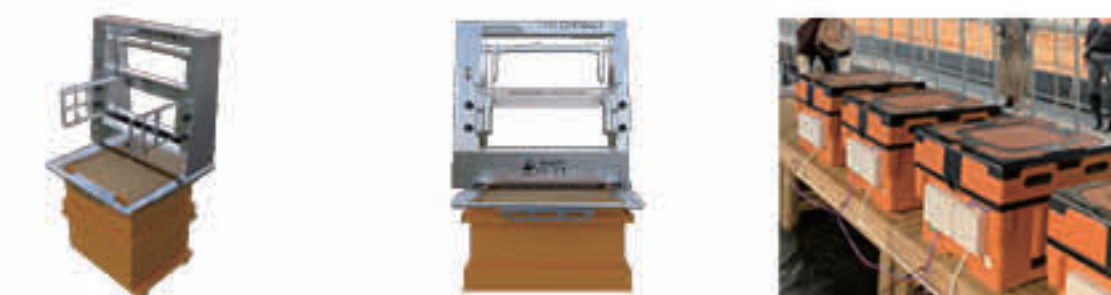
Agriculture, Forestry, and Fisheries

Automatic Beehive Extractor /Smart Beekeeping System

Daesung Smarthive
http://smarthive.co.kr/kr/

Company

Daesung Smart Hive is a company that develops products for beekeeping that can be easily done by anyone, including non-professionals, beginners, and people of all ages, in rural areas where labor supply is difficult. The engineers of the brand 'Smart Hive' have developed products by directly performing beekeeping tasks to make it easy for non-professionals, beginners, and people of all ages to engage in beekeeping. Since its founding, the company has started with the equipment 'Automatic Beehive Extractor' and aims to introduce various beekeeping automation machine products. Daesung Smart Hive is a beekeeping equipment manufacturing company and is committed to the development of beekeeping automation with reliable technology. The company is the world's number one company in the field of unmanned automated agriculture systems that anyone can use.



Technology & Product

- The Automatic Beehive Extractor allows even novice beekeepers to remove beehives from the beehive frames and simultaneously extract honeycomb. It also provides storage space for the honeycomb on the exterior of the beehive. All of these processes can be easily performed and completed with just a single button press. Daesung's Automatic Beehive Extractor is capable of performing three tasks – extraction, comb uncapping, and comb storage – with minimal workforce. It streamlines and automates these tasks for convenient and efficient operation. When using the Automatic Beehive Extractor, the worker's wrists and forearms experience less fatigue, significantly reducing strenuous labor. In the same amount of time, it allows operations on a minimum of 30% more beehives than the traditional methods.
- The Smart Beekeeping System consists of a temperature and humidity control device and an automatic feeding system. It is installed in the existing beehives currently in use. Through integration with a mobile app, it can monitor and adjust the internal temperature and humidity of the beehive in real-time. Additionally, it automatically replenishes the water tank to ensure it is filled when needed for feeding. This means that various manual tasks that were done previously are now made more accessible with the numerous functions of the Smart Beekeeping System. Implementing the Smart Beekeeping System optimizes beekeeping facility management and the honeybee habitat, helping to prevent mass bee mortality incidents and assisting in the harvesting of beekeeping products like propolis, royal jelly, bee venom, beeswax, and more.

Participation/ Awards |

Winner of the U.S. CES Innovation Award in the Robotics Engineering category (2021), Selected as Venture support company for four consecutive years

Interested Countries | United States, Central Asia, Africa

Contact | +82) 10-3361-9010 E-mail | yjkim@smarthive.co.kr
Location | 109 Banryong-ro, Deokjin-gu, Jeonju, Jeollabuk-do, Republic of Korea

Growing-UP, MilkPower

TIPA LFF
www.lff.kr

Company

LFF Corp is a company that has developed the world's first organic method of desiccation (Metal-organo Complex Method) and bioconversion (Bioconversion Method) technologies. The company specializes in the following areas: ● Technology for inhibiting and suppressing the proliferation of plant virus infections. ● Technology for inhibiting and suppressing the proliferation of fire blight (apple/pear) and pesticide-resistant bacterial infections. ● Technology for inhibiting and suppressing the proliferation of Panama disease (banana) as well as diseases in rice, potatoes, and grass (golf courses). ● Soil rapid improvement technology to overcome damage caused by chemical fertilizers (salinization).

Business items include exporting organic agricultural materials which fall under the category of tropical climate coping-type technologies (one of the world's top four food resource protection and soil environmental improvement technologies), and supplying products domestically and internationally.

Participation/Awards |

Excellent and Promising Agricultural Food R&D Technology(2022), Selection for Outstanding National Research and Development Achievements "100 Excellence" (2023)

Interested Countries |

CIS countries (Uzbekistan, Belarus, Armenia, Kazakhstan, Kyrgyzstan, Tajikistan, etc.), Southeast Asia (Vietnam, Laos, India, Indonesia, etc.)

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Technology & Product

Growing-UP: A crop virus and disease response technology based on organic desiccation technology. Organic desiccation technology involves the binding of inorganic substances to organic materials, leading to the development of new functions (pesticide efficacy and fertilizer efficacy). This technology has simultaneous infection suppression and proliferation inhibition effects on plant virus diseases (TSWV, CMV, PepMoV, BBWV2, ZYMV, WMV, CGMMV, TMV, BBTV, PVX), as well as pesticide-resistant fungal diseases in fruits (fire blight), bananas (Panama disease), rice, grass, potatoes, and more.

Milk Power: A technology-based on bioconversion for rapid reduction/improvement of soil salinity and growth promotion. Bioconversion technology utilizes specific development enzymes to separate effective ingredients, resulting in the simultaneous development of new functions (fertilizer efficacy + pesticide efficacy) in bio materials. This technology (Raw material: milk, Active ingredients: GMP (Glycomacropeptide) and Sialic acid) enhances plant physiological activity by inhibiting plant virus infections and acting as a natural hormone substitute, promoting rapid reduction of soil salinity (improving the utilization of chemical fertilizer ingredients by 150%) and simultaneous soil improvement.



Agriculture, Forestry, and Fisheries

NWK A-FV(A)

NaeWoiKorea, Ltd
http://naewoikorea.com/

Company

Primarily an exporter of chemical products, NaeWoiKorea, Ltd has recently been developing products for the disinfection of avian viruses and bacteria, as well as insect repellents. Over the past 19 years, NaeWoiKorea, Ltd has exported paint additives and coatings to approximately 57 countries, whilst holding various certifications.

Technology & Product

NWK-A-FV(A) is an effective product for the disinfection, sterilization, and odor removal of avian viruses, including avian influenza, Newcastle disease virus, Salmonella, and various other viruses and bacteria that can affect the poultry industry. Once applied, it provides effective disinfection, sterilization, and odor elimination for one month. By using the product, vaccinations and antibiotics are not required, making it a product equipped with Prevention Bio-Security functionality.

Participation/Awards |

Registered with the U.S. FDA, EPA certification, HALAL certification
Interested Countries | Indonesia, Malaysia, India

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MyFeed

AimbeLAB
https://www.aimbelab.com/service

Company

AimbeLab leads research and solutions with the belief that cutting-edge technology is the core of transforming the primary industries, specifically the livestock and feed-tech sectors. One of the largest expenditures in animal farming is attributed to feed. However, AimbeLab has identified a significant lack of visibility within the supply chain, as approximately 20 million tons of feed are transported across the nation annually. AimbeLab's services were created to address this issue. The company's aim is to enhance transparency in feed management and to share it, thus resolving problems such as unpredictable ordering practices, uncertain demand forecasting, and inefficient delivery. The company's goal is to revolutionize the livestock feed supply chain through data-driven decision-making. Its platform connects feed production with consumption, enabling real-time information sharing and efficient ordering and delivery. Consequently, the company aims to provide more value and efficiency to the agriculture and livestock industry, thus promoting sustainable growth within the industry.

Technology & Product

'MyFeed' provides a solution for the entire process of feed measurement, management, logistics, and delivery. The real-time monitoring of transactional farms and delivery planning significantly reduces the frequent delivery trips that were common due to one-sided feed orders from farms. Through the alert functions provided in the ERP and app, feed levels and conditions can be tracked, enabling rapid response in case of any issues. This solution is offered at one-fourth of the price of the conventional feed management products and does not require professional installation technicians, thus minimizing the introduction and maintenance costs. It eliminates the inefficient and inconvenient method of climbing a ladder or estimating feed levels by sound to check the remaining feed. By tracking feed consumption and remaining quantities, it addresses feed waste issues, preventing depletion through feed level monitoring and alerts, and simplifying the ordering process. Reducing carbon emissions is a significant concern for companies. A decrease in the overall number of deliveries can help reduce carbon emissions.

Participation/Award |

Finland SLUSH Global Awards 1st Place (2022), Excellence Award in the Agricultural and Livestock Big Data Competition (2022)

Interested countries | Europe, Southeast Asia

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Agriculture, Forestry, and Fisheries

Milk-T

TIPA
ThinkforBL
Thinkforbl.com

Company

Since its inception in 2008, ThinkForBL has achieved notable success in the field of software (SW) engineering. Particularly, ThinkForBL is an engineering company with world-class technological expertise in artificial intelligence (AI) reliability verification based on data balance. Leveraging its expertise, ThinkForBL derives practical solutions from various real-world issues through a scientific and technical perspective. Furthermore, the company has developed various tools that can illuminate the causes and essential aspects of problems, not limited to the observed phenomena, which has enabled the company to set new global standards in software engineering. Additionally, drawing upon the knowledge accumulated over time, ThinkForBL has ventured into the smart livestock market with the goal of creating a better future life. It has developed the smart livestock service platform 'Thinkfarm' to help livestock farms prosper and improve their health.

Technology & Product

In order to present the possibilities of digital transformation (DX) and carbon neutrality in the livestock industry, ThinkForBL has developed 'Milk-T', an AI-based 'Individual Precision Specification' service that precisely analyzes the condition of cows, including activity levels, sleep times, digestion status, and milk production capacity, to provide recommendations for the appropriate feed amounts. 'Milk-T' collects behavioral data such as activity levels, sleep times, and digestion status through wearable sensors attached to the cows, and storing this information in the cloud to analyze the cows' health status. Based on this analysis, the service offers tailored recommendations for optimal feed amounts and suggestions for reducing carbon emissions through feed management. Currently, the company is focusing on securing demonstration farms in Southeast and Northeast Asia to further enhance 'Milk-T'.



Participation/Awards |

First Half Overseas Technology Exchange Consultation (Vietnam, Thailand, China) (2023), Carbon Neutrality Expo (2021-2023)

Interested countries | Thailand, Philippines, Tunisia

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Health Care and Social Welfare

Health Care and Social Welfare

Sample pretreatment technology using ion concentration polarization

CALTH

<http://www.thecalth.com/>

Company

CALTH, established in 2018, is a specialized medical device company for in-vitro diagnostics. The company produces and sells more than 18 types of rapid diagnostic reagents and immunoassay equipment for infectious virus testing and female hormone testing. The company's focus is on providing "faster, more accurate results at affordable prices" through our advanced technologies. CALTH possesses sample pretreatment technologies such as Ion Concentration Polarization and Nano-trap (BEETLES2), as well as Deep Learning analysis technology for accurate diagnostic testing using diagnostic equipment or mobile apps. CALTH continuously strives to develop in-vitro diagnostic devices for on-site diagnostics, meeting the demands of the diagnostic market.

Technology & Product

Ion concentration polarization technology is a technique that uses nanochannels with ion-permeable membranes and an electrical field to perform bio-sample pretreatment by controlling the concentration and location of molecules. By creating an electrical field between selective ion-permeable membranes, ICP induces ion concentration polarization, concentrating various biomolecules (proteins, DNA, hormones, etc.) by over 100 times between the electrodes. There are no limitations on the types of samples (blood, urine, saliva, etc.) or biomolecules to be concentrated, making it possible to secure high sensitivity diagnostic systems in both immunoassay and molecular diagnostic fields.

Participation/Award |

Selected for the Small and Medium Business Administration's "Collabo R&D Project" (2019), Selected for the Small and Medium Business Administration's "Market-Responsive Project" (2021)

Interested Countries | Europe, Indonesia, Thailand, Vietnam

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Plasma Ion Module, AI Self Vision Measurement Inner Eye Kiosk

pixelRo

<http://pixelro.com/>

Company

In November 2017, Pixelo, originally a subsidiary of Samsung Electronics, was spun off and reborn as a startup company. Pixelo is actively developing and commercializing a digital sensing-based vision measurement application and kiosk that can self-diagnose eye conditions. The company also sells protective films for eyesight domestically and internationally. Additionally, Pixelo has ventured into a new business involving the commercialization of plasma-based air purification and disinfection solutions, expanding its operations globally.

Technology & Product

AI Self-Vision Measurement In-Eye Kiosk: The In-Eye Kiosk uses AI to detect a person's face from the input image and recognizes the structure of natural language, such as paragraphs, sentences, words, etc., while determining the position of the text. Using deep learning models, it identifies whether both eyes are covered by analyzing the location information of the detected eye and text. Additionally, it employs examination algorithms, including eye age measurement algorithms, automatic chart conversion algorithms based on distance, and pupil tracking technology, to enhance the accuracy of eye examinations.

Plasma Ion Module: It generates active hydrogen (H) and oxygen ions (O₂-) through microplasma discharge, which combines to form hydroperoxyl radicals (HOO-), providing disinfection and antibacterial effects.

Award/Certification |

Seoul Award: Selected as an Excellent Product (2020) Grand-Star Problem Solver Platform Vol. 3 (Bio Health) Competition: Awarded the Grand Prize (2021) Heilongjiang-Hanju Global Startup Competition: Received an Encouragement Award (2022).

Interested Countries | USA, Dubai, Indonesia, Japan

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Health Care and Social Welfare

Fetaon Forecaster, Flofit



Company

MoaData is a specialized company in artificial intelligence-based anomaly detection and prediction services. It possesses multiple patents and SCI-grade papers in various areas, including multimodal anomaly detection and prediction technology, physiological age, and disease prediction technology. The company applies its expertise to platforms and services in the fields of ICT infrastructure, healthcare, and pet care. Additionally, MoaData supplies wearable IoT devices such as smart bands and smart rings.



Participation/Awards

Participation in the First-Half Overseas Technology Exchange Consultation Meetings (Vietnam, Thailand, China) (2023), Participation in the Carbon Neutrality Expo (2021-2023)

Interested Countries

United States, Poland, Saudi Arabia, UAE, Thailand, Japan

Technology & Product

Fetaon Forecaster: Fetaon Forecaster is an AI-based anomaly detection and prediction solution designed for ensuring the stable operation of large-scale information systems for businesses and public organizations. It departs from the conventional threshold-based management of ICT infrastructure operational status and instead collects and classifies a variety of metrics (performance indicators) and logs (hardware and software) from ICT infrastructure. These data are stored on a big data storage device and, utilizing our patented artificial intelligence engine, provide services for predicting failures and analyzing root causes.

Flofit: The Flofit platform is integrated with health management services such as body age estimation and disease prediction, leveraging bio data obtained from wearable IoT devices such as smart bands and smart rings, including measurements like body temperature, heart rate, and oxygen saturation. It offers tailored services for various groups, including individuals, delivery workers, and workers in special industries like hospitals, fire departments, and night shift workers, to help prevent occupational health and safety issues like fatigue and sleep disorders.

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Laser Arm, X-Ray Equipment



Company

Hanmac Total System Co., Ltd. is a company with a history of about 20 years, specializing in precise design and production of various medical equipment cases and apparatus. Since its establishment in 1990 as Hanmac Industry, the parent company, Hanmac Total System officially started in 2002, aiming to provide a Total Medical Equipment Solution, leveraging the accumulated manufacturing technology through various sheet metal-related techniques. Hanmac Total System Co., Ltd. began producing various medical equipment cases and X-ray apparatus. Subsequently, the company entered the medical equipment component market, leading the market through the development and mass production of products like laser machines and ENT chairs. Hanmac Total System Co., Ltd. continuously innovates and develops its business to provide products tailored to the customers' needs.

Technology & Product

Hanmac Total System has received quality management certifications for the entire process, from raw material procurement to design, development, and production. The company has established a high-stability design system with 3D CAD and precise simulation implementation. Over the years, Hanmac Total System Co., Ltd. has provided stable supplies to numerous domestic and international customers, thus receiving validation for the quality of its products.

X-Ray Apparatus: Hanmac Total System Co., Ltd. specializes in the integrated and all-in-one production of X-ray apparatus, ensuring a more professional production process.

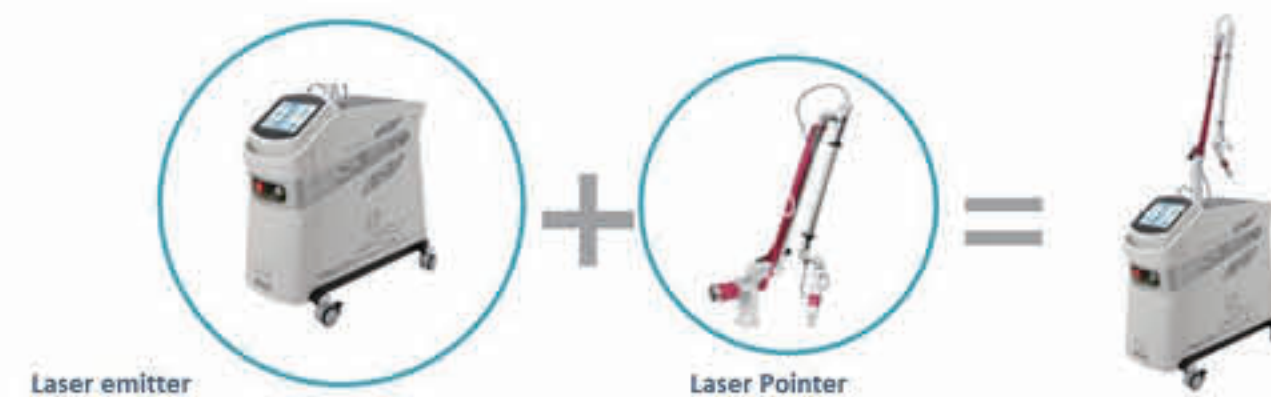
Laser Arm: The company's laser arm is a seven-joint multi-articulated arm used for delivering CO₂ and ND:YAG laser systems. It is advantageous due to its low beam loss compared to the products from other manufacturers.

Medical Equipment Apparatus: As a specialized medical equipment manufacturer, Hanmac Total System Co., Ltd. has established a production system optimized for small-batch production of a variety of product types. The company has extensive manufacturing experience in fields like otolaryngology and physical therapy equipment over the years.

Interested Countries | All countries

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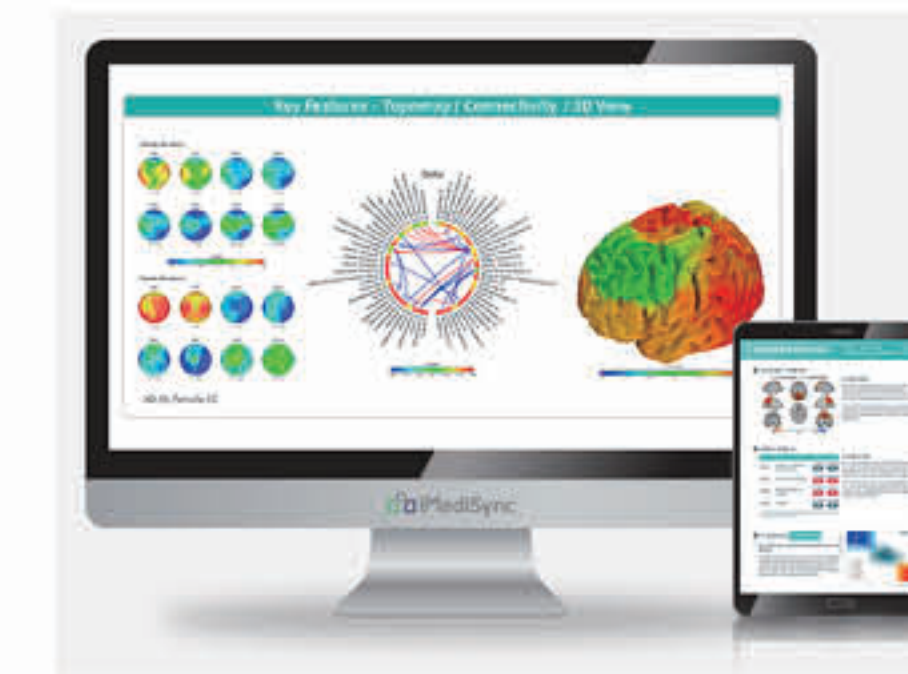
Health Care and Social Welfare

iSyncWave



Company

iMedisync is a specialized company in artificial intelligence-based digital mental healthcare platforms. After measuring brainwaves, the company offers a comprehensive solution through an artificial intelligence (AI) automatic analysis cloud platform. The company possesses the technology to monitor and provide early care for mental health issues in various environments, including schools, workplaces, hospitals, telemedicine, drug clinical trials, and more. iMedisync is taking significant strides towards establishing digital mental health as the global standard.



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Technology & Product

iMedisync has developed the iSyncBrain cloud platform for the automatic analysis of brainwave and heart rate variability. iSyncBrain is equipped with artificial intelligence-based technologies for automatic noise reduction, extraction of brainwave indicators from sensors and sources, provision of simple and detailed reports for individual comparisons, and group analysis functions for research purposes. The company has added a biomarker named iSyncBrain-M1 through clinical trials with the Korea Food and Drug Administration (KFDA) for the early detection of mild cognitive impairment (MCI) of the Alzheimer's type. Currently, active collaborative research is underway for the development of biomarkers that can confirm the presence of amyloid deposition (a causative substance in Alzheimer's disease), recovery from the state of consciousness, post-stroke cognitive impairment, the presence of alpha-synuclein (a causative substance in Parkinson's disease), and the brainwave phenotype of depression. Recently, iMedisync has developed the innovative 19-channel dry EEG measurement and digital therapeutic convergence device called iSyncWave, which is integrated with the iSyncBrain software platform. It includes personalized near-infrared therapy along with photobiomodulation (PBM) care features.

Participation/Award

Commendation from the Ministry of Health and Welfare for the 4th Industrial Revolution (2021), Participation in CES (2021-2023)

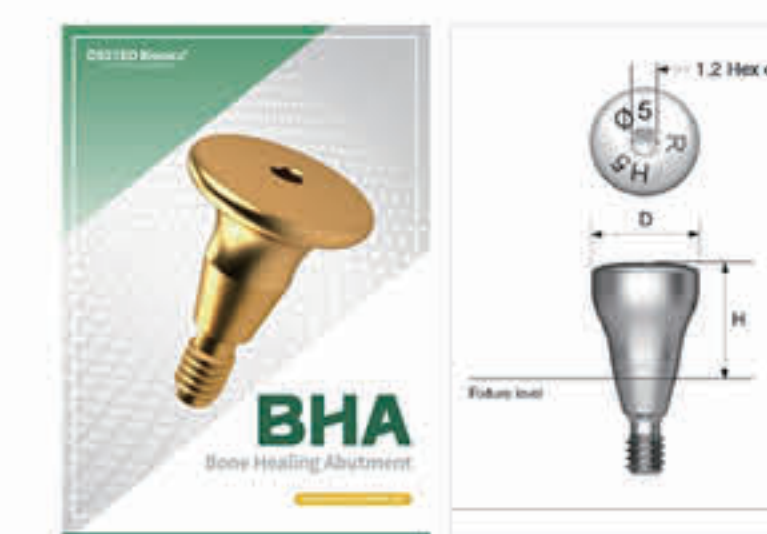
Interested Countries | United States, Europe, Asia, Middle East

HA Dental Implant Abutment



Company

Implants have long been associated with the pain points of current dental practitioners. These issues stem from the limitations of artificial bone coating technology, resulting in frequent implantation failures due to interface separation. Moreover, difficulties in implantation arise due to weakened bone structures in the elderly and increasing diabetic patients. Despite an increase in average lifespans, implants are still subject to relatively short lifespans due to their low strength. To overcome these technological constraints, extensive research and a network of technical collaborations have led to the development of implant abutments (Fixtures) with a threefold improvement in interfacial separation rate compared to existing products. This innovation represents a groundbreaking new technology, unique in the world.



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Technology & Product

The Ossteobionics's flagship product, the Dental Implant, is created by fusing a highly durable base material with excellent biocompatibility to artificial bone. It distinguishes itself from conventional implants by its unique method of fusing artificial bone to the surface of titanium, enhancing its biocompatibility and resulting in more efficient responses for patients with systemic diseases such as diabetes and high blood pressure.

The company's technology is based on a novel technique developed by the KIST (Korea Institute of Science and Technology) and, after two years of research and development, the company has successfully produced a product with the same expected performance. This development utilizes high-strength titanium material and employs a processing technique that enhances biocompatibility, going beyond simple coating using artificial bone. It incorporates Nano-second laser processing technology, which maximizes the synergy between dissimilar materials by utilizing laser energy to induce a powerful bonding interaction between titanium and artificial bone constituents.

Participation/Awards

U.S. Patent Registered - Apatite Film Formation Technology Using Laser Encouragement Award at the Bio Startup Competition (2022), Germany/Keulen IDS (International Dental Show) (2023)

Interested Countries | Kazakhstan, Uzbekistan, Vietnam, Thailand, Indonesia, Mexico, Chile

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