



Technology for People ! SMART LIFE !

www.mjvisiontech.com

AIBIS
AI Business to Integrated Surveillance

[Head Office] B, 6th Floor, Jonggak Building, 673 Gukchaebosangro, Jung-gu, Daegu
[Factory] 511, Nongong-ro, Nongong-eup, Dalseong-gu, Daegu Metropolitan City

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CHAPTER

I

Company Profile



VISIONTECH



Foundation 04/05/2016

Turnover \$4.6 M

Employees 30

Business

- Intelligent Video Analysis Technology
- LPR(License Plate Recognition)
- Machine Vision

Products

- Intelliegent Smart Control Solution
- Intelligent CCTV System
- Smart School Zone System
- Smart Traffic System
- Smart parking System
- Machine Vision

Core Technology

- Retaining image analysis technology and application technology based on deep learning
- Object, event detection/classification/tracking, vehicle number recognition, etc.

Key Performance



Ceo's Message

With interest in artificial intelligence and rapid technological development, It has become an era in which AI coexists.



With interest in artificial intelligence and rapid technological development, AI has become an era where AI coexists.

In the future, AI-based platforms will be closely linked to our daily lives in various fields such as safety, security, and transportation.

MJVT wants to move forward together with you so that we can provide more accurate and clear judgment and information in an era where AI makes judgments in our thinking and actions.

MJVT is developing and applying core image analysis algorithms such as life safety, school safety, autonomous driving, industrial safety, transportation, and smart factory fields by grafting artificial intelligence-based image analysis technology.

Ultimately, AI-based technology aims to improve the quality of human life by focusing on developing core technologies such as life, disaster/safety, and transportation with the goal of “technology for people.”

Thank you.

MJ VISIONTECH

CEO Jooyoung Kim

2022

Acquisition of Good Software
With Missing and Finding Solution



2022. FEB

Donation of Daegu Education Student Art Creation Center Safety Monitoring System (business agreement)



2022. APR

Acquisition of monitoring device procurement bidding qualification



2022. JULY

Barcelona Smart City Expo



2022. NOV

2022. JAN



2022 CES

2022. MAR



5G-based autonomous driving convergence technology monitoring environment and promotion of roadside device construction

2022. JUN



Acquisition of Good Software
EDGE CCTV 1.0

2022. SEP



ITS unexpected situation detection system performance evaluation
Acquisition of 'top class'

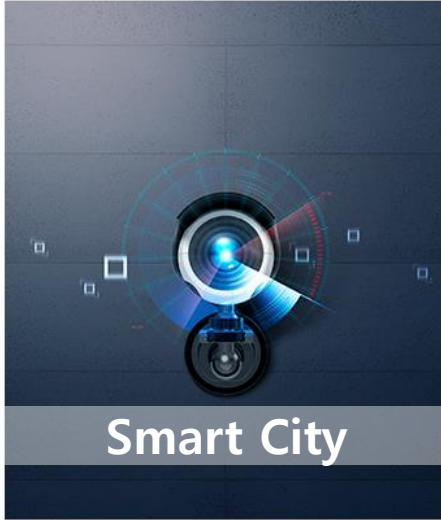
2022. DEC



Established Apartment Smart surveillance system

Main Business

City Safety



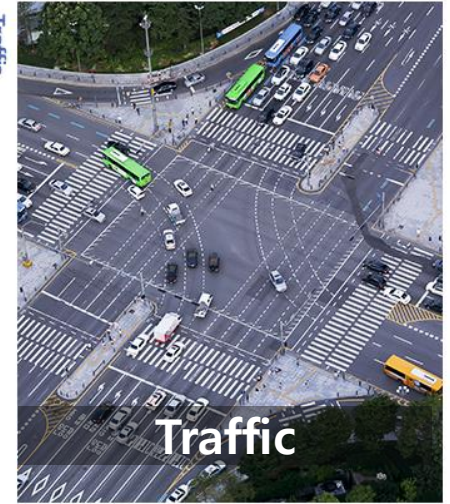
Find Missing Children



School



Traffic



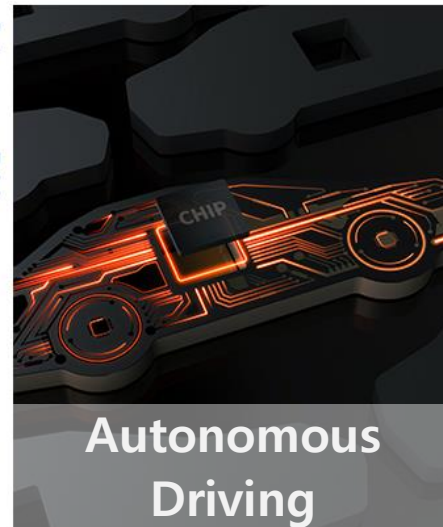
Construction



Edge/Edge AI CCTV



Autonomous Driving



Machine Vision



Korean Government Procurement Certification

제 2023-0508-00123 호

직접생산확인증명서

1. 경 제 품 명 : [대분류] 공학연구및기술기반서비스
 [소분류] 소프트웨어 유지및지원
 [세부품명] 소프트웨어유지및지원서비스

2. 생 산 업 체 명 : 주식회사 엠제이비전테크

3. 사 업 자 번 호 : 870-81-00261

4. 대 표 자 성 명 : 김주영

5. 소 재 지 : (본사) 대구광역시 중구 국제보상로 673, 6층 비호(동인동2가, 종각빌딩)
 (공장1) [870-81-00261] 대구광역시 북구 호암로 51 213호 (대구상성창조경제단지내 벤처오피스동)

※ 뒤쪽 「생산공장 목록」에 계속

6. 유효기간 : 세부품명별 유효기간은 뒤쪽 참조

「중소기업제품 구매촉진 및 판로지원에 관한 법률」 제9조제4항 본문 및 같은 법 시행규칙 제5조제3항에 따라 위와 같이 직접생산을 증명합니다.

2023년 01월 11일

중소기업유통센터 대표

• 유의사항(행정조치) : 직접생산 확인기준 미충족 및 직접생산 미이행 등 「중소기업제품 구매촉진 및 판로지원에 관한 법률」 제11조(직접생산 확인 취소 등) 등에 해당하는 경우, 직접생산 확인 취소(신청제안) 및 정사처벌, 과징금 부과 등의 대상이 될 수 있습니다.
 • 이 증명서는 중소기업확인용으로 사용할 수 없습니다.
 • 이 증명서는 중소기업제품 공공구매통합정보망(www.smpp.go.kr)을 통해 출력(2023-01-11 09:02)한 증명서로서 동 정보망에서 진위여부를 확인할 수 있습니다.

Software

제 2023-0507-00138 호

직접생산확인증명서

1. 경 제 품 명 : [대분류] 공학연구및기술기반서비스
 [소분류] 소프트웨어 엔지니어링업
 [세부품명] 세부품명 상세내역 뒤쪽 참조

2. 생 산 업 체 명 : 주식회사 엠제이비전테크

3. 사 업 자 번 호 : 870-81-00261

4. 대 표 자 성 명 : 김주영

5. 소 재 지 : (본사) 대구광역시 중구 국제보상로 673, 6층 비호(동인동2가, 종각빌딩)
 (공장1) [870-81-00261] 대구광역시 북구 호암로 51 213호 (대구상성창조경제단지내 벤처오피스동)

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2023년 01월 11일

중소기업유통센터 대표

• 유의사항(행정조치) : 직접생산 확인기준 미충족 및 직접생산 미이행 등 「중소기업제품 구매촉진 및 판로지원에 관한 법률」 제11조(직접생산 확인 취소 등) 등에 해당하는 경우, 직접생산 확인 취소(신청제안) 및 정사처벌, 과징금 부과 등의 대상이 될 수 있습니다.
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Software Engineering

제 2023-0632-00078 호

직접생산확인증명서

1. 경 제 품 명 : [대분류] 공학연구및기술기반서비스
 [소분류] 데이터서비스
 [세부품명] 빅데이터분석서비스

2. 생 산 업 체 명 : 주식회사 엠제이비전테크

3. 사 업 자 번 호 : 870-81-00261

4. 대 표 자 성 명 : 김주영

5. 소 재 지 : (본사) 대구광역시 중구 국제보상로 673, 6층 비호(동인동2가, 종각빌딩)
 (공장1) [870-81-00261] 대구광역시 북구 호암로 51 213호 (대구상성창조경제단지내 벤처오피스동)

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Data service

[별지 제3호서식]

제 2022-0429-00563 호

직접생산확인증명서

○ 대 분 류 : 공공안전및치안장비

○ 세 품 명 : 감시및탐지장비

○ 동 제품의 직접생산 가능범위 : 불임의 세부품명별 필수특이사항 에 따름

○ 생 산 업 체 명 : 주식회사 엠제이비전테크

○ 사 업 자 번 호 : 870-81-00261

○ 대 표 자 성 명 : 김주영

○ 소 재 지(본사) : 대구광역시 북구 연암로 40 201동 301호
 (공장1) : [870-81-00261] 대구광역시 북구 호암로 51 213호 (대구상성창조경제단지내 벤처오피스동)

※ 뒷면 「생산공장 목록」에 계속

○ 유효기간 : ※ 불임의 세부품명별 유효기간 참조

「중소기업제품 구매촉진 및 판로지원에 관한 법률」 제9조제4항 본문 및 같은 법 시행규칙 제5조제3항에 따라 위와 같이 직접생산을 증명합니다.

출력일자 : 2022년 07월 25일

중소기업유통센터 대표

• 유의사항(행정조치)
 ① 하청생산 제품 또는 다른 회사 완제품 등 직접생산하지 아니한 제품, 직접생산한 완제품에 다른 회사 상표 부착제품 납품금지
 (위반시, 모든 중소기업과 경쟁제품 직접생산확인 취소 및 6개월간 제정청 금지, 정사처벌)
 ② 생산실비의 입대, 배자 등 직접생산확인기준 미충족 시 30일 이내에 증명서 반납 (미 반납시, 해당제품 직접생산확인 취소 및 6개월간 제정청 금지)
 ③ 직접생산확인받은 품종의 이전 시 30일 이내 증명서 미반납 시 직접생산확인 취소
 * 이 증명서는 중소기업확인용으로 사용할 수 없습니다.
 * 이 증명서는 중소기업제품 공공구매통합정보망(www.smpp.go.kr)을 통해 출력(2022-07-25 17:59)한 증명서로서 동 정보망에서 진위여부를 확인할 수 있습니다.

Surveillance and Detection

Good Software Certification



EDGE CCTV v1.0



Missing Person Tracking v1.0



AIBIS v2.0



AIBIS v1.0

Certification

[공시번호: WJNF-qEHa-rPhr-woMq] [발급일자: 2023년 01월 13일]



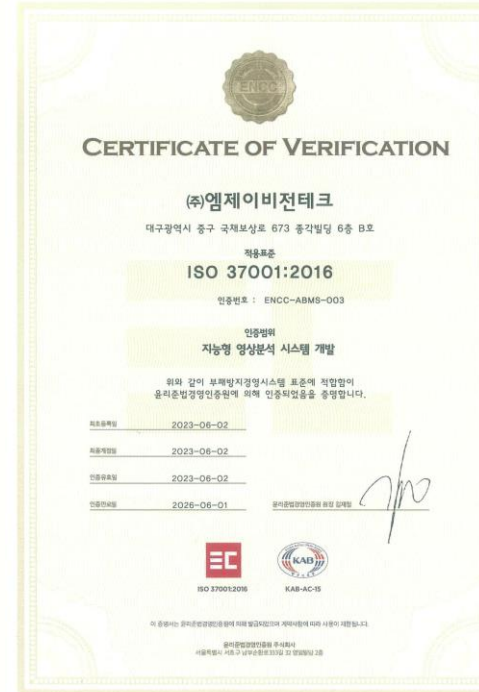
* 한국산업기술진흥협회는 발급한 인증서의 유효기간이 만료되면 "www.ncs.or.kr"에서 "인증만료"를 클릭하면 원본과 동일한 인증서를 발급받을 수 있습니다.

Research Institute Certification



IAF 대그는 IAF MLCA에 가입된 한국인증기관(KAB)로부터 KCA가 인정받았음을 나타내는 마크입니다.
KAB 대그는 한국인증기관(KAB)로부터 품질경영체 인증기관으로 인정(인증번호: KAB-QC-57) 되었음을 나타내는 마크입니다.
주소: 서울특별시 강남구 광명로 280 르노타워 1913호 Tel. 02-445-9081 fax. 02-445-9082
www.kcar.or.kr

ISO 9001



ISO 37001



ISO 37301

CHAPTER



AIBIS

Artificial intelligence-based smart surveillance solution
for crime prevention and the establishment of social safety network



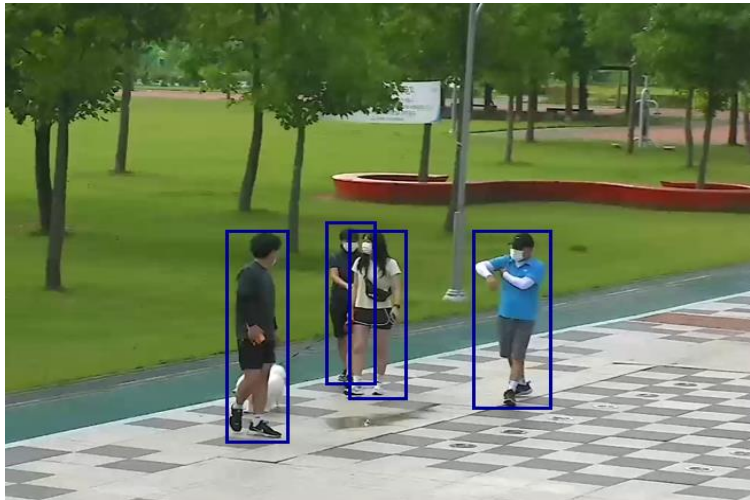
VISIONTECH

Real-Time Object Detection and Classification

- Detection of **more than 95% objects** using deep learning artificial intelligence technology



Pedestrian



Pedestrian Information

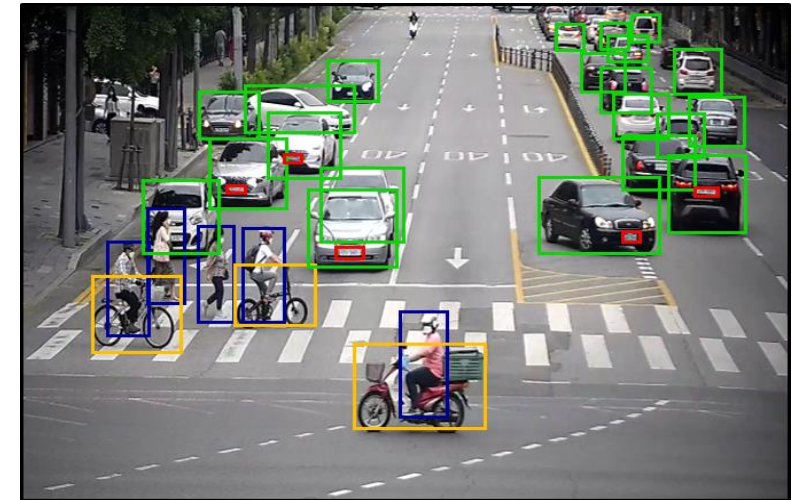
Search hair, color, shape, type of top, color



CAR



motorcycle



Over 95% Object Detection

- Car and motorcycle object detection
- Type of Vehicle (car, van, bus, truck, taxi)
- Color of Vehicle (7 colors)

LPR (License Plate Recognition)

LPR(License Plate Recognition) And Object Detection

- Recognizes small-sized license plate letters from a single camera's long-distance image and supports a high number recognition rate of 99% or more even in degraded image quality by image compression
- Minimum **15pixel** Recognition



KoROAD

[별칭: 도로교통공사]

도로교통공단 본부
[26466] 광운도·원주시 혁신로2(전국동)
TEL:030-749-5227, FAX: 030-749-5918

등록서번호
N00001-2018-01-0175
표의자: 125/1초 23

평가결과

평가항목	평가 결과율			
	모전	모후	하·과	총 균
인식률 (%)	100.0	100.0	100.0	100.0
오인식률 (%)	0.0	0.0	0.0	0.0
검자율 (%)	100.0	100.0	100.0	100.0
시스템	정상	정상	정상	정상

※ 성능평가기준 및 항목별 차등평가기준은 「별첨용 CCTV」 성능평가 지침서에 근거함.

평가자본 및 방법

인식영역 : 차량 주행방향 전역에 부착된 차등번호판(2개차선 통시)

평가 대상장비 주요사항

모델명 : AIBIS-

차등번호 인식 평가시스템

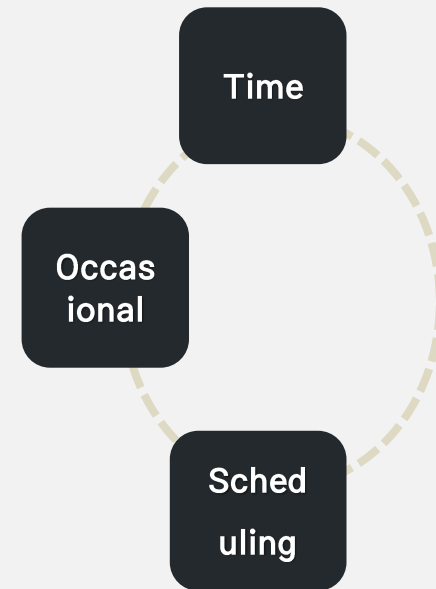
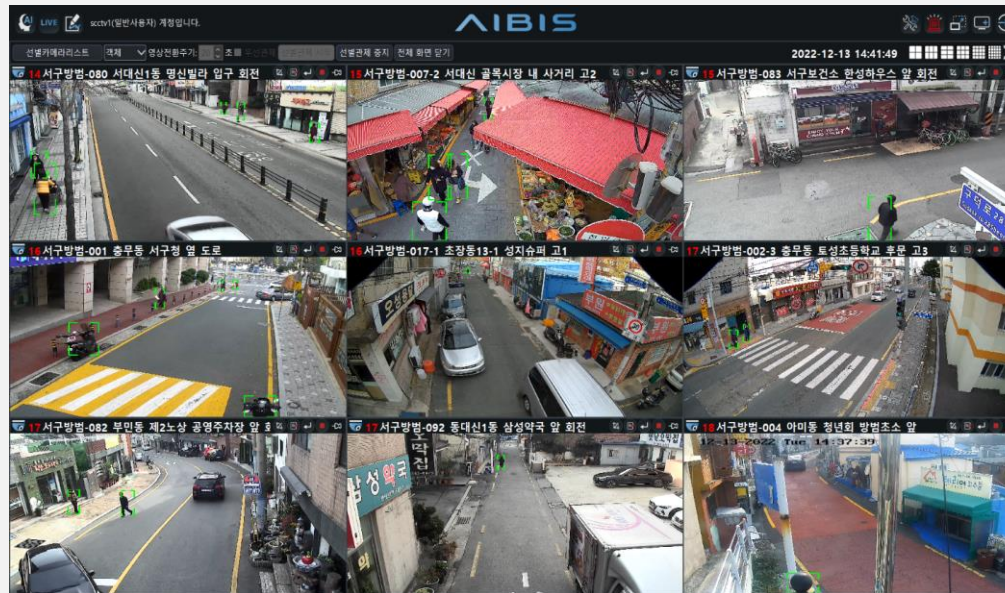
- 영상 처리 용이성
- * CPU : 인텔 i3-5100
- * MEMORY : 16GB
- * GPU : GTX-1060TI
- * PSU : ATX1000W
- * 최소추진장치명 : SSD 250GB
- * 배분용량 : 기타0GByte
- 카메라 : 5메가픽셀
- 조명장치 : Ultra Power IR LED x72

이 하 이 벽

공인인증서 A4210*2971

AI Smart Control [Event Detection and Real-Time Alerts]

- Detect objects based on artificial intelligence and transmit them to the control screen in real time
- Detect multiple events and operate priority control mode in real time

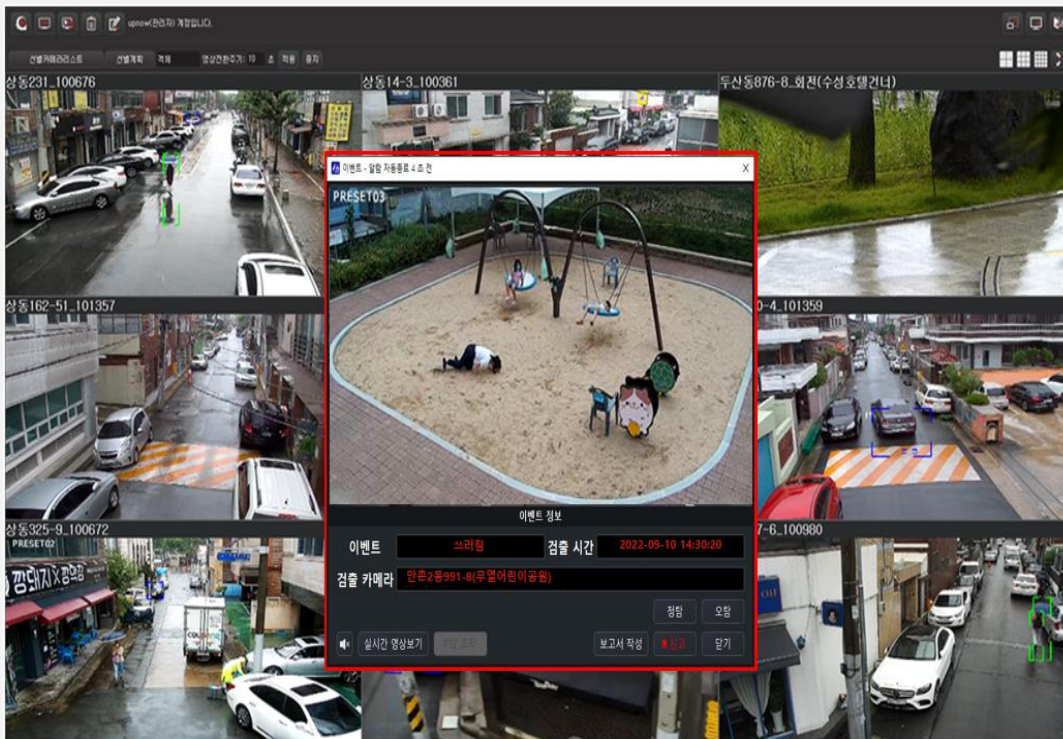


Concentrated control that requires judgment

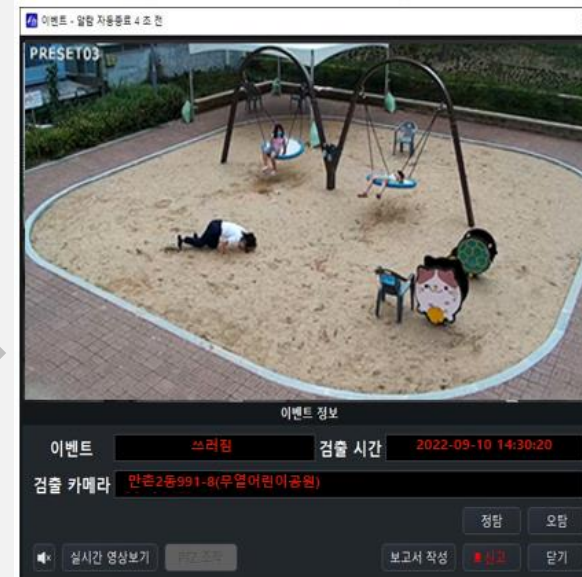
Automated Priority Control

Smart Surveillance System

- Automatically Analyze Events and controls
- Detecting Multiple events



Alarm with Lights and Sound



POPUP

Analyze
True
Detection

Call
Report

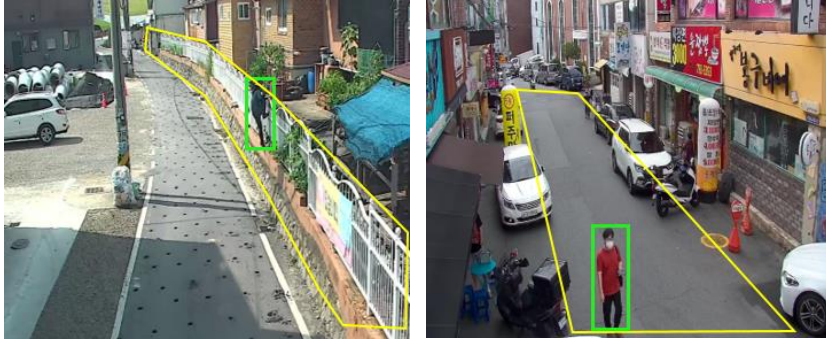
Event Detection



Intruder



Loitering



Unusual Event detection through behavior analysis



Fire



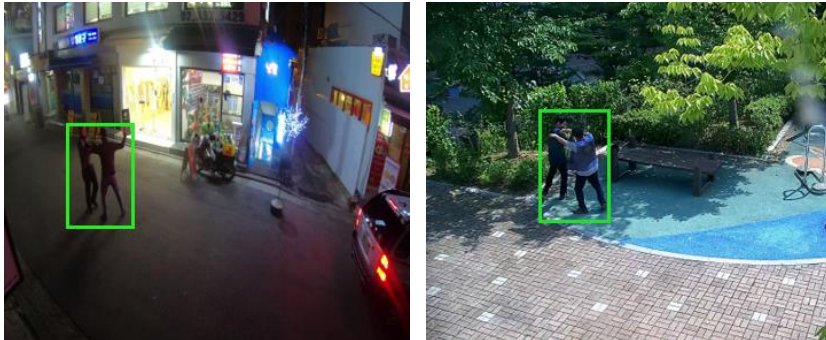
Detect Flame and Fire



Fight



Crowding



Detection of unexpected situations through behavior analysis



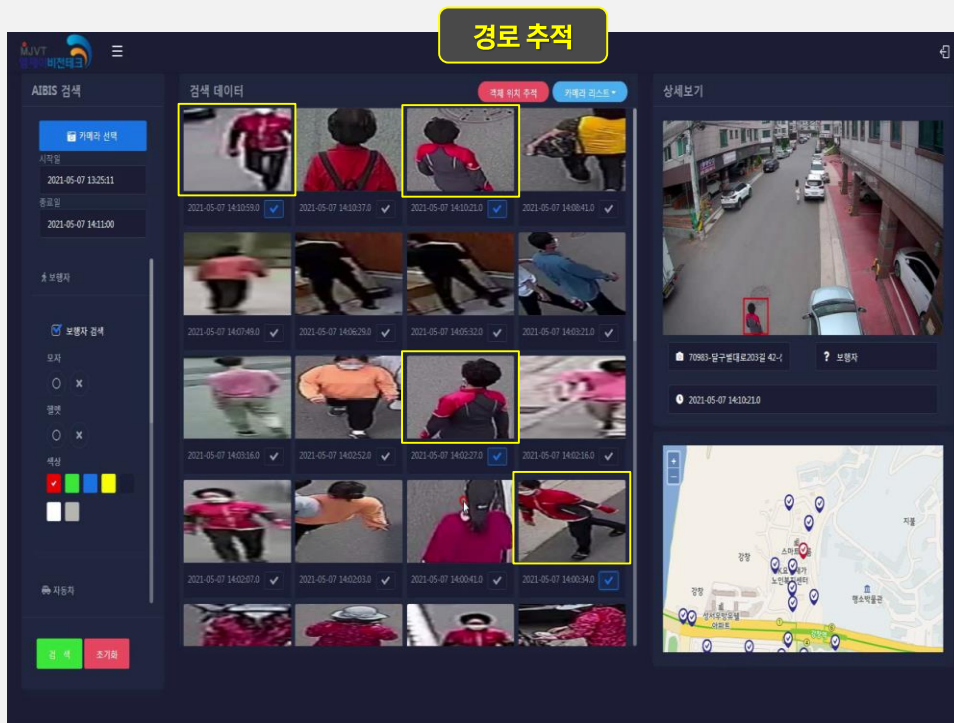
Falling



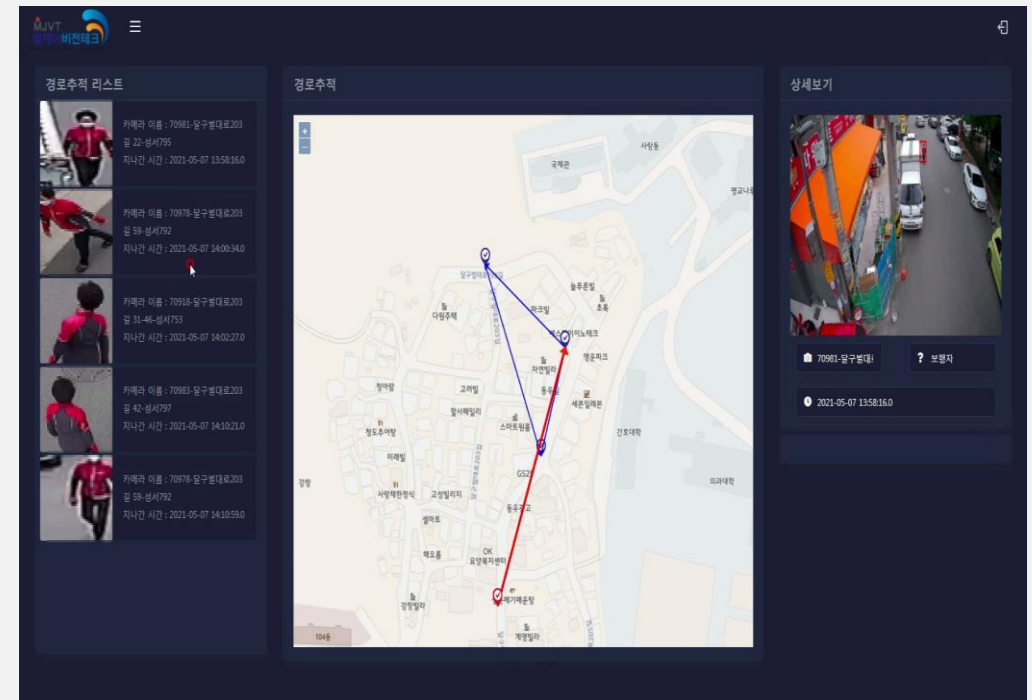
Unexpected situation detection through deep learning

Smart Search Solution System

- Searching multiple keywords-based objects and events
- Search for recognizable objects and event information to track tracks
- Path Tracking is possible when GIS in Linked



〈 Smart Search 〉



〈 Path Tracking 〉

CHAPTER



MAIN PRODUCTS



VISIONTECH

Smart City

City Safety



Background

AI-based smart control solution for crime prevention and social safety net construction

Features

Rapid Response/Improvement Of Crime Prevention
Reduction Of Construction/Operation Costs
Differentiated Technology
Maximization Of Control Efficiency
Proven Excellence

Function

1. Public Safety

Detect objects based on artificial intelligence and transmit them to the control screen in real time

Detect multiple events and operate priority control mode in real time

2. Residential Area

Residential area where you can live in peace: surveillance of illegal dumping of garbage, etc.

3. Park Area

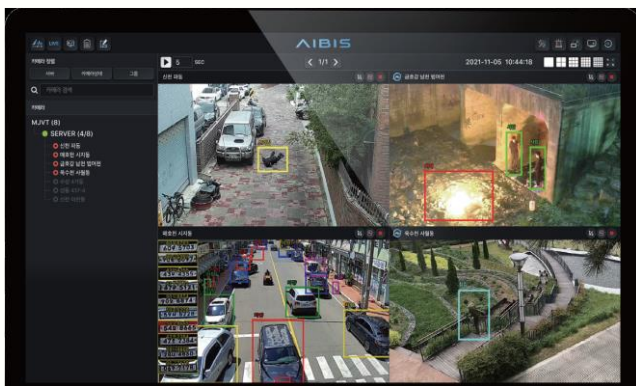
Creating a safe and clean park

Advantages

200 Channels of Video by constructing one video server
Real-time detection and notification of multiple events

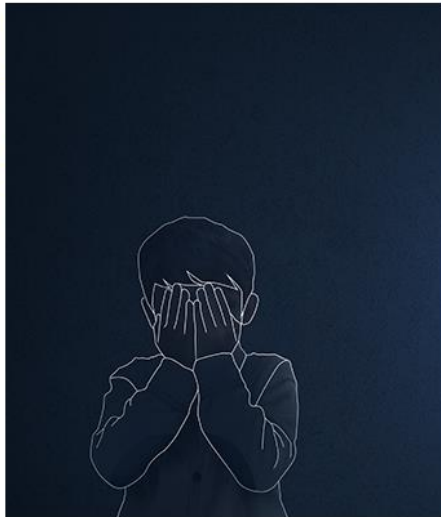
Certification

Good Software EDGE CCTV 1.0



Missing Person Tracking

Find Missing Children



Background

Developed for faster processing with real-time analysis through AI to prevent the phenomenon of missing the golden time due to consuming a lot of manpower and time to check CCTV when searching for missing children/seniors with dementia/missing people, etc.

Features

Building quality AI datasets Real-time search within the expected range by searching for the clothes of the missing person at the time of disappearance

Function

high accuracy solution

Search hair, color · shape · type of top, color · shape of bottom, type of shoes, bag, etc., and analyze people within 500m~1km based on the missing location to detect similar passers-by

01. Enter Missing Person Information

Image, attire (top/bottom/color), equipment, weather/time

02. Video Connection

Uploading collected videos or linking real-time video (local government CCTV)

03. Movement Visualization

Missing automatic line detection / real-time location search



School



Background

Safety monitoring that minimizes blind spots to prepare for various safety accidents in schools

Features

AI-based school-customized safety monitoring system

- Establish areas where school safety accidents can occur, such as hallways, playgrounds, and stairs
- Protection of school property and facilities and control of external personnel during late night and early morning hours when security personnel are absent

Function

1. Improving Rapid Response And Safety Accident Prevention
2. Reducing Construction Cost And Maximizing Efficiency
3. Reduction Of False Detection Rate
4. Function Customization Support



Collapse



Fight



Property Invasion



Loitering



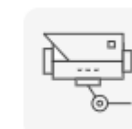
Control



Fire(Flame,Smoke)



Alarm



Smart control

Transportation Field

Traffic



Background

Real-time traffic flow detection through analysis of traffic big data (traffic volume, accidents, construction, etc.) and deep learning, and system operation optimized for signal control through data collection and accuracy and reliability verification

Features

Smart Transportation Safety System

Utilize accumulated traffic information to reflect it in the establishment of basic urban transportation plans such as traffic flow, and prepare a foundation for social problems and transportation system improvement

Function

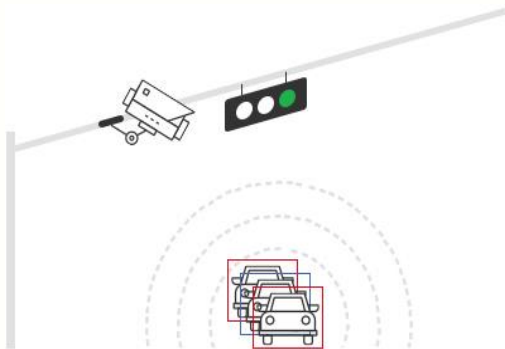
Providing smart road services

Real-time video analysis and monitoring using deep learning algorithm

- LPR(License Plate Recognition) And Object Detection
- Notification Of Registered Objects And Event Information (Search For Wanted Vehicles And Stolen Vehicles)
- Notification Of Reverse Drive On The Highway



Serving Smart road Service



Traffic in Collecting

Deep Learning-based formation

Construction

Construction



Background

Safety accident prevention and prompt response at construction and industrial sites

Features

Safety management and budget reduction at construction and industrial sites by introducing edge AI devices

01. Construction Site Selective Control
02. Workplace And Worker Management
03. Access Control
04. Preparation For Safety Accidents Of Heavy Equipment

Function

Field data collection/refining/processing → AI learning → convergence analysis → visualization / control / field demonstration



- Worker And Vehicle Access Management
- Worker Movement Tracking, Management Risk Behavior Recognition
- Dangerous (Violation) Behavior Alerts, Records
- Management Of Vehicles Entering Production Or Construction Sites, Prevention Of Accidents In Hazardous Areas
- Configure Edge AI With NPU And CCTV Camera Together
- Ultra-Light Real-Time Video Analysis Solution
- Integrated Monitoring Of Construction Safety, Process, Security, Etc. Based On The Acquired Data

EDGE/EDGE AI CCTV

Edge/Edge AI CCTV



Features

Features

Function

A system that processes the image analysis algorithm, which was previously analyzed centered on the server, in a local control system

- 01. Independent Video Analysis CCTV Based On Edge AI Device
- 02. Used For Purposes Such As Parking Violation And Illegal Trash Dumping, Local Security, Etc. Through Specialized Object Recognition Functions
- 03. Securing Existing CCTV Compatibility And Scalability In The Form Of Camera Integration Or Edge Board Module Addition
- 04. Applicable To Small-Scale Local Governments Or Privately Owned Tourist Destinations



-Possession Of Deep Learning-Based Object Recognition Technology

Possession of deep learning-based object recognition technology capable of real-time processing

-Edge AI Device Development Completed

-Edge AI Device-Based Smart Home Cam/Development Of Smart Traffic Information Analysis Device

ITS

Autonomous Driving



Background

Technology for recognizing objects in an autonomous driving environment, technology for vehicle control, driving situation judgment, and driving strategy decision technology are core technologies for autonomous driving, requiring high precision.

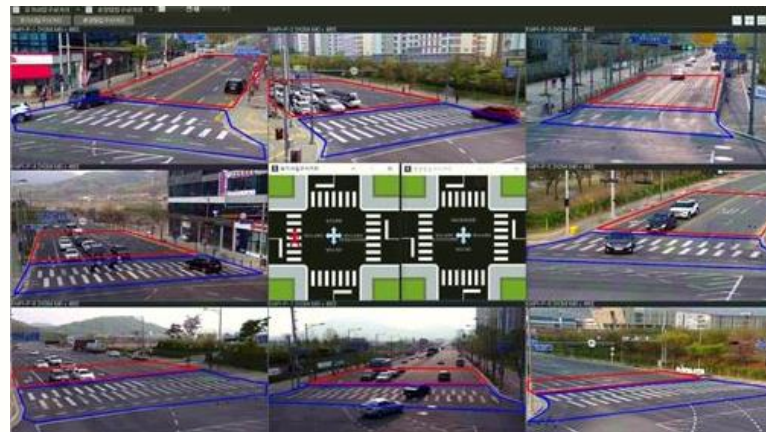
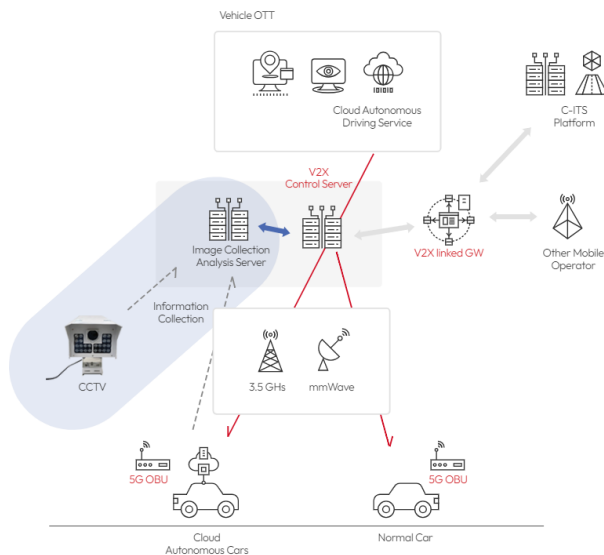
Features

Artificial intelligence-based situational awareness technology Technology that learns and analyzes situational awareness of recognition, judgment, and control, which are core technologies of autonomous driving, by computer (image analysis technology) deep learning big data acquired through cameras

Certification

Acquired 'Top Grade' In All Performance Evaluations Of The Unexpected Situation Detection System

- True Detection Rate (TDR) 100%
- Different Type Detection Rate(DTDR) 0%
- 0 False Alarms (FA)



Machine Vision



Background

As one of the processes of the smart factory, the defect rate of delivered products is minimized by determining whether the product is good or defective through a deep learning-based vision inspection machine.

Features

Assembly Automation

Reliably and repeatably inspect hundreds or thousands of parts per minute

01. Optimized Optical Setting For Inspection Target And Detection Size

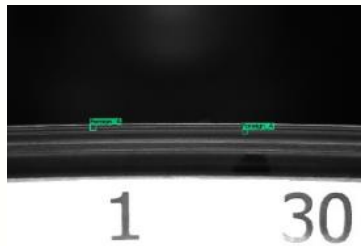
02. Excellent Defect Detection Ability By Combination Of Deep Learning And Rule Base

03. Provide Inquiry And Statistics System For Improved Quality Control

Function

Machine vision system configuration

Deep learning-based machine vision inspection system



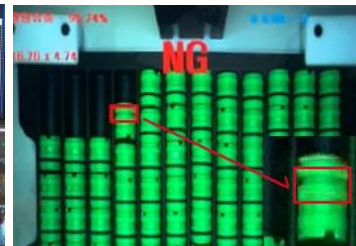
Detection of small defects



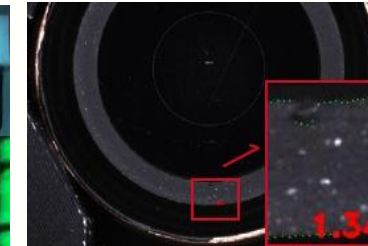
Defect detection in process



Process monitoring at each stage of assembly



Product shipment inspection



Incorporation of image processing technology



Control product supply



VISIONTECH

Thank you