

























# OneMoreSecurity Inc.

# SOLUTION GUIDEBOOK

We will run towards the goal of becoming a "Global Unicorn Company" that provides customer-centric innovative technologies in the field of "Information Security and Artificial Intelligence"



# **Contents**





# OneMoreEYE (OMEYE)

# Al Video Surveillance All-in-one Safety Platform

Smart video search Smart selective surveillance Video export



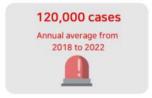
#### Awards & Certifications



# □ Necessity of Introducing



# of increase in crimes against polices



# of reported missing persons every year in Korea

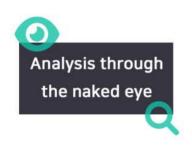


# of increase in CCTVs against standards



# of death in industrial accidents every year in Korea

# □ Problems of Existing Solutions







1 hour-long video

Multiple CCTV
footages



Cannot analyze

automatically for

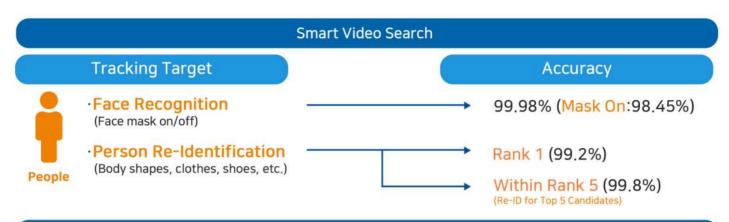
footages Accuracy

- 50%



Event-based surveillance

# □ Technical Approach



#### Smart Selective Surveillance

Detect events automatically for people
(loitering, trespassing, falling, overcrowding, counting, jaywalking, etc.),
vehicles (intrusion, illegal parking, license plate, etc.),
and other events (flooding, fire, smoke, hard hat, safety strap, illegal dumping, SOS, etc.)

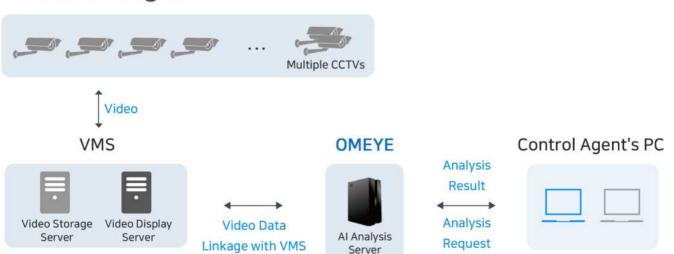


# □ Key Points

- ·High Accuracy ·Fast Analysis
- (Guaranteed fully verified algorithm (Takes under 6 seconds for 1 hour long video) performance by KISA and KOLAS)
- ·Real-Time Detection ·Efficient Analysis
- (Detects the target's location in real-time) (Analyzes multiple targets and CCTVs all together)

  No CCTV Replacement Smart Selective Surveillance
- (Applicable to any existing environment) (Reduces control agents' intense workload & reliance)

### □ Service Diagram



# □ Important Screen and Operational Scenario

Smart Video Search

Fast search for targets from multiple CCTVs with supporting real-time detection and animated route map

#### Select Targets



by selecting from CCTV video (body or face)



by uploading pictures (body or face)



by selecting attributes

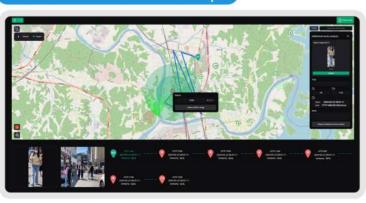
#### Select Conditions



Select Candidate Targets



Create Animated Route Maps



Select the Live Button for Real-time Detection

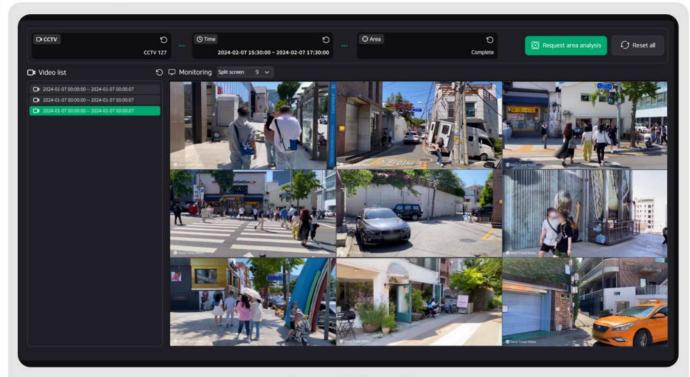


Download Report Results



Fast search for objects within the region of interest (ROI) especailly for investigating hit and run cases and more

#### Area analysis



Area analysis results

### **CCTV** monitoring

Real-time video monitoring with supporting playback time, capture, download, etc.



Monitoring (1-4-9 split)

### Smart Selective Surveillance





#### Surveillance for public safety

Event detection for fire, smoke, intrusion, loitering, fall down, overcrowding, illegal dumping, illegal parking, jaywalking, etc.



fire/smoke



intrusion



fall down



overcrowding



illegal dumping



flooding/intrusion (flooded area)

#### Surveillance for industrial safety

Event detection for no safety helmet, no safety ring, SOS, fire, smoke, trespassing, loitering, fall down, etc.



no safety helmet



SOS hand signal



no safety hook



fire/smoke

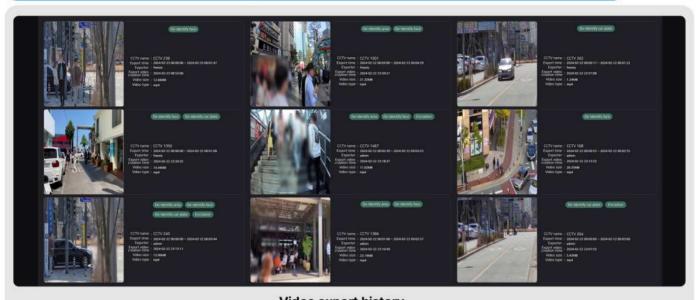


heavy vehicle access detection



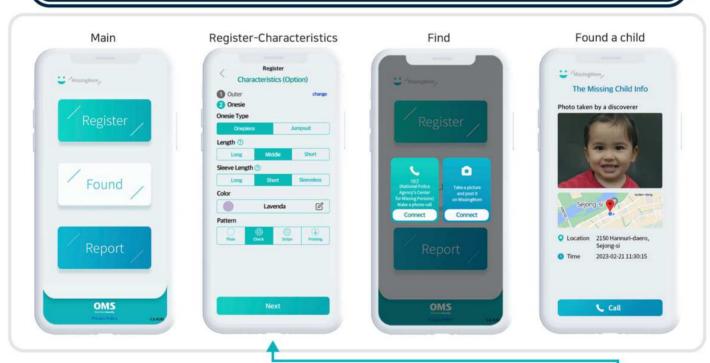
fall down

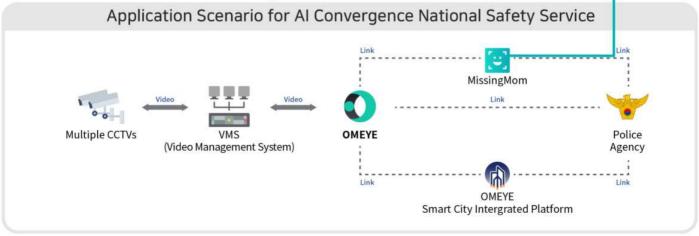
- Privacy de-identification by AI for personal information such as face, license plate, and specified area
- Video export control with supporting only playable dedicated media player with passwords



Video export history

#### MissingMom: mobile app-based smart participatory living lab service for finding missing persons







# **MissingMom**

# Smart Service to Secure the Safety of Missing Children & Dementia Patients

Providing a smart service to report a missing person fast via smartphone or kiosk





# □ Key Points

- Software performance and quality are fully certified by KISA, TTA, and KOLAS
   (Acquired accredited certification for self-developed face recognition model (OMFACE)
   by TTA V&V)
- ·Smart city living lab service

(Service applied with face recognition to find missing people that enables active participation of citizens)

·Simple report

(Simple report via registration of wearing information and face/body image)

•Establishment of an efficient system for guaranteed civil safety (Reduce costs through intelligent service of guaranteed civil safety)

# □ Necessity of Introducing



- ·It is urgent to prepare measures regarding the public safety from the increasing number of reports of missing people such as children, dementia patients, intellectual, autistic, mentally disabled, etc.
- ·As of 2022, the number of annual reports for missing children and elderlies with dementia is approximately 50,000 cases in Korea according to the statistics of the National Police Agency

# □ Operational Scenario : Family





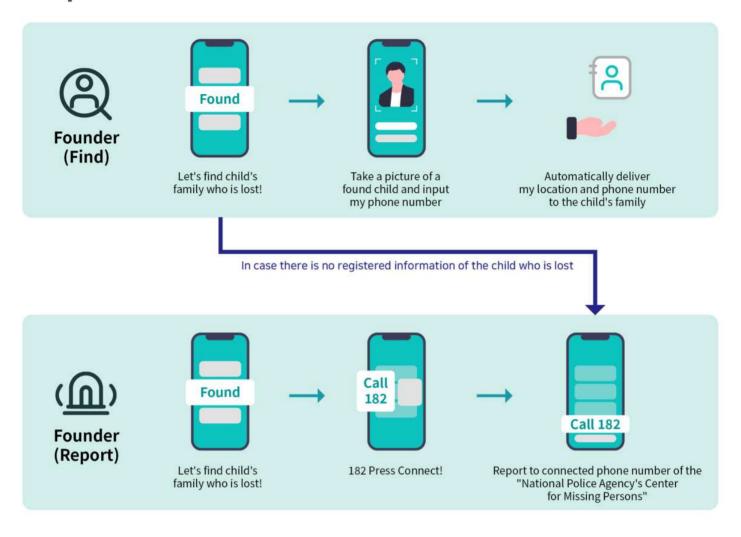




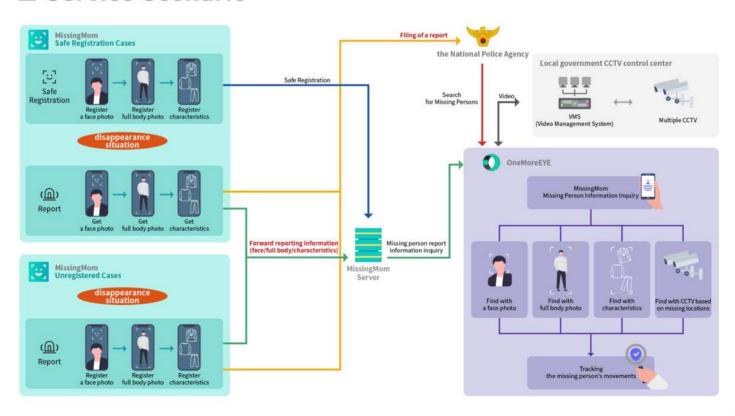
Tracking and visualizing the person's movement path from CCTV video via OneMoreEYE



# ☐ Operational Scenario : Founder



### □ Service Scenario



# □ Important Screen

Main



Find



Register-Characteristics



Found a child





# OneMoreFACE (OMFACE)

# **Deep Learning-based Face Recognition**

Face authentication service to easy use of payment, access control and more





# □ Key Points

- ·High facial recognition accuracy rate of 99.98% based on the test of K-NBTC from KISA (Face recognition works even with changes in lighting, pose, expression, and accessory (Also works with a 'Mask'))
- ·Secured service trust

(Acquired the accredited ceritication of K-NBTC test about facial recognition algorithm performance from KISA)

·Real-time processing

(Processing time of user authentication is less than 1 second based on 100,000 face DB)

- Support cameras from 640\*480, Windows, Linux, Android and IOS
   (Requires even low hardware and supports for various operating systems)
- · Available to apply on various services

(Applying to access control, attendance management, medical appointment, E-TEST, image processing system, ERP, video conferencing solution, etc.)

# □ Performance Test Results

Accruacy rate of face recognition with change in lighting, pose, expression, and accessory



#### Tested out 4,250,000 times through K-NBTC



Lighting Recog Rate

100%



Expression Recog Rate

99.92%



Pose Recog Rate

100%



Accessory Recog Rate

100%

# □ Service Application







# MissingMom

Smart Service to Secure the Safety of Missing Children & Dementia Patients

Providing a smart service to report a missing person fast via smartphone or kiosk



#### **OMEYE**

Al Video Surveillance All-in-one Safety Platform

Smart selective surveillance supporting event monitoring in real-time for both public and industrial safety

Video export supporting Al privacy de-identification and dedicated player



# OneMorePASS (OMPASS)

# On-Premise/Cloud

FIDO (Fast IDentity Online) Solution

biometric and passwordless authentication
Phishing resistant MFA(Multi-Factor Authentication) Service



#### **▶** Certifications



# □ Necessity of Introducing



- · Increasing demand for user authentication technology that guarantees strong security and user convenience
- Perfectly solves the risk factors of password authentication according to FIDO standard authentication method based on public key



### Several Risks of Password Authentication

- ·Most users use less than 5 passwords
- ·Passwords are the leading cause of 80% of data loss
- ·More than 50% of users have never changed their passwords in 5 years
- Most users reuse the same password across multiple sites

# □ Next-Generation Integrated Authentication Solution

Resolves the inconvenience and anxiety of password methods Guarantees user convenience and security at the same time







### □ Advantages

#### User Convenience

Apply various authentication methods and manage integrated authentication lifecycle with this one OMPASS (mobile authentication device).

#### Completely Eliminate Security Vulnerabilities

Through the "passwordless login", complete removal of security vulnerabilities due to password use and management and also satisfy one's security compliance.

#### ·Compliance with International Standards

Comply with FIDO Alliance international standard based on public key.

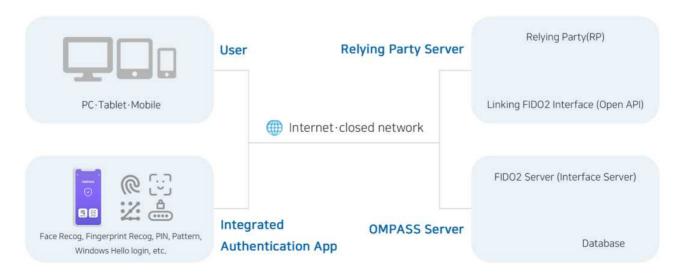
#### ·Establishing a zero trust environment

Complete a zero trust environment by establishing a strong and reliable FIDO authentication system.

# □ Specification Diagram

System Specifications

- ·Server: Windows, Linux (Intel Xeon 2GHz or higher, RAM 64GB, HDD 1TB or higher recommended)
- ·Client: Android, iOS



### □ Key Points

#### Various AuthN Methods

#### ·Various authentication methods can be expanded

Application of the latest various user authentication technologies based on public Key

#### ·User-selectable authentication

Supports various authentications such as Face Recog, Fingerprint Recog, PIN, Pattern, Windows Hello login, and more

#### **Client-Centric Flexibility**

#### ·Client-Centric Service

Provides an optimized service for the environment of customer needs through user integrated authentication app or SDK

#### ·Minimize Developing Time

Provides linking module (interface server) to minimize applying time and developing work

#### Integratable authentication services

Supports all web-based web-based service, Windows client, Windows login, mobile app, Linux PAM, MaxOS, Radius, Redmine, Gooroom login, etc. client

#### Optimized the Customer Environment

Supports UAF (Universal Authentication Framework) and U2F (Universal Second Factor)

#### Optimized the Network Environment

Full support for Internet and closed network environments

#### **Enhanced System Security**

#### Secured Security

Conducted penetration testing through a professional white hacker team and completed security measures

#### ·Enhanced Administrator Authentication

Requires OMPASS authentication separately when accessing the admin page

#### ·Service Access Control

By browser, user location, IP address, and time schedule

#### Prespond Strongly againt Phishing Attack

Verifies the user access device (or browser)

#### Reinforcement of Mobile Authentication Device Security

Verifies the jailbreak, forgery, and latest version of the user device

#### Policy Violation Alarm Service

Sends a push notification or email to administrator or user in case of violation of authentication policy

### □ Main Screen

#### **Mobile App**



- Allows users to log in with mobile authentication devices
- Provide user selection row authentication methods

#### Windows Login



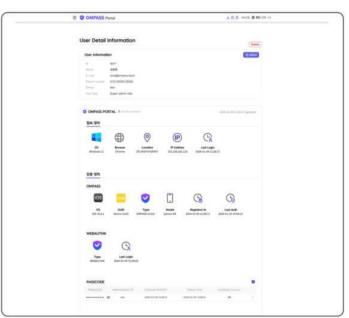
- Provides Windows login service
- Provides OTP authentication methods in an offline environment

#### **Admin Page**



- Provides dashboard functionality for administrators
- Provides application management, user management, and log management capabilities

#### Managing device properties



- Provides user and authentication device details management services
- Providing PASSCODE certification services for non-certified persons



# MyPCProtector 4.0

# Vulnerability Management and Scanning Solution for PC

One-click diagnosis and measurement





# □ MyPCProtector 4.0

OMSMyPCProtector 4.0 provides PC security vulnerability diagnosis and its solution that allows the endpoint security to be operated in the most secured status against security threats on the user's PC. ! Most security incidents start from vulnerable PCs of internal users with low security awareness.



# □ Advantages



- · One-click PC vulnerability check
- Forced PC vulnerability check and measuring function provided (measures unable to terminate)
- · Provides easy measureable UI (automating function is provided)
- · Provide a guidance into specific measures



- · Official council member of My PC Protector
- Acquired the Certification Level 1(=1st grade) of Good Software(GS), the Certificate of Software Quality from the Telecommunications Technology Association(TTA)



- · Provide statistics and reporting data on PC inspection results
- · Provide intuitive dashboard function
- · No need for separate customizing
- · Provides agent automated integrity check function
- · PC status can be checked at all times through widget service



· Compliance with the Cybersecurity Diagnosis Day



- · Addition of administrator-defined checklists can be created
- · Possible to support network blocking through "S-Capsule" linkage
- · Support linking to third-party solutions

# □ Important Screen







#### User's PC Check Result

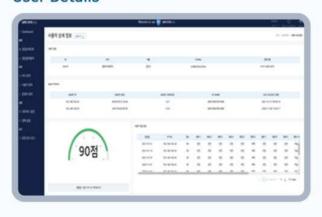




#### Widget



#### **User Details**



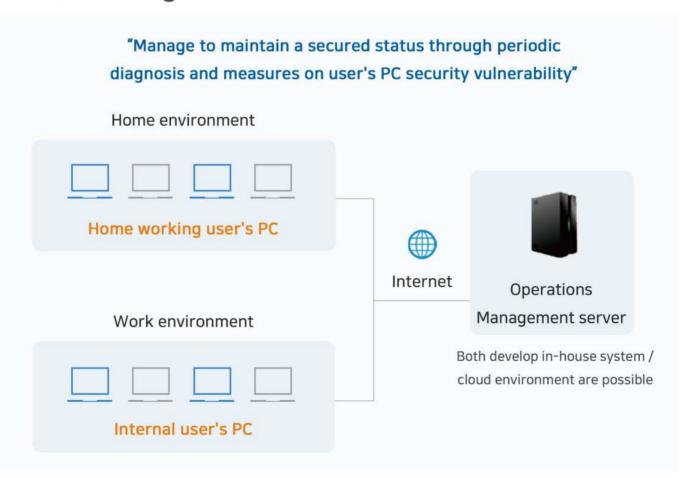
#### Results Report



# □ Key Points

Functions	Characteristics	
Vulnerability Check & Measure	One-click diagnosis and measurement for 16 types of vulnerability including the "Cyber Security Diagnosis Day" checklist Possible to force inspection according to the schedule (monthly/weekly/daily) policy through central management (cannot be terminated) Display the inspection results for each list as something like safe/vulnerable so that users can be intuitively understand	
Result Analysis	Provide individual evaluation report and detailed history Provide informations on overall/departmental evaluation/inspection rate and top 5/bottor top 5 of departmental rating, and provide a function to download the result report	
Management	Support linking with HR databases and other security solutions     PC status can be checked at all times through widget service     Automatic inspection of client program to verify forgery or falsification (security enhancement)	

# □ Service Diagram





# **OMS** Code

### **Document Fraud Prevention**

2D barcode and watermark for preventing forgery and counterfeiting of certificates and licenses



#### **▶** Certifications



# □ Application Scenario

**OMS Code** can be applied to various domains such as certificate forgery verification, book voice conversion, activation, expiry date, inventory management, fintech, healthcare, copy protection, etc.



# □ Key Points

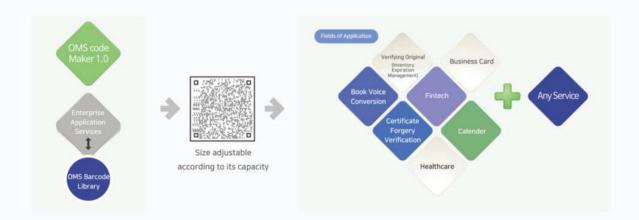
# OMS Barcode (High-density 2D barcode)

# | High-density 2D barcode with the world's largest data insertion in 300dpi environment

- · Information stored in high-density 2D barcodes can be printed out to screen and voice through mobile app
- · Data encryption / decryption via KCMVP crypto module
- · Optimized solution that can help the visually impaired and elderly people to improve accessibility of information (compliance with the Broadcasting and Communication Standards (KCS.KO-06.0181))

Generation

Barcode generation using Windows PC-only applications
 (OMS Code Maker) or libraries



Detection

- Easy acquisition via mobile app (Android·iOS)
   (provided with OMS mobile app or library)
- · Acquire OMS barcode displayed on printout and monitior screen



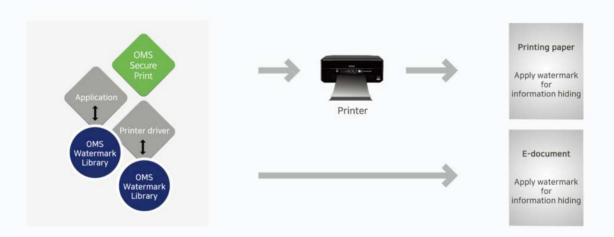
# OMS Watermark (Embrocating Watermark)

#### | Watermark for hiding information with invisibility (whole embrocating method)

- · The mobile app allows you to acquire hidden informations in the watermark when shooting anywhere in the printout.
- · Applicable to various services such as printout generator tracking, certificate forgery verification, activation, security paper export history managemendt, etc.

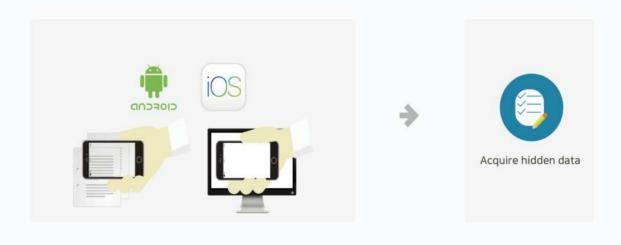
Generation

 Apply watermark when printing through OMS print control solution or dedicated library



Detection

- Easy acquisition via mobile app (provide with OMS mobile app or library)
- · Acquire OMS Watermark displayed on printout and monitor screen



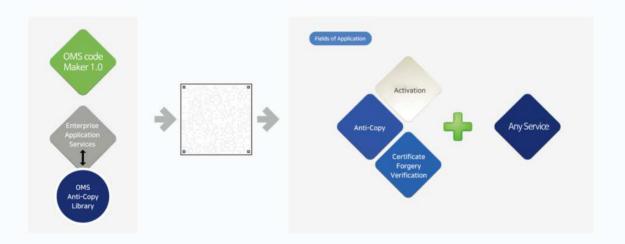
# ♦ OMS Anti-Copy Mark

#### | Determine whether to copy through the naked eye or mobile app

· Apply it to various services such as verifying the original, activation, certificate forgery verification, etc.

Generation

· Apply Anti-Copy Mark using OMS Code Maker



Detection

 Easy acquisition via the naked eye or mobile app (provided with OMS mobile app or library)





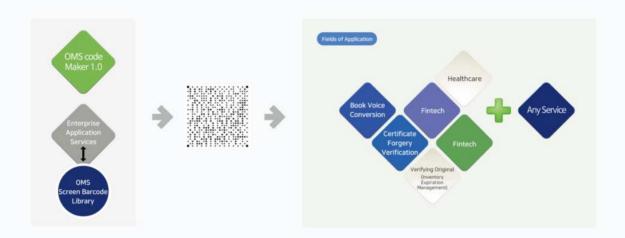
# ♦ OMS Screen Barcode (Low-Density 2d Barcode)

#### | Low-density 2D barcode optimized for screen environment

- · Information stored in low-density 2D barcodes can be acquired through mobile app
- · Applicable to various services such as user authentication, certificate forgery verification, book voice conversion, activation, expiry date, inventory management, fintech, healthcare, etc.

Generation

Generate the barcode using Windows PC-only applications
 (OMS Code Maker) or libraries



Detection

- Easy acquisition via mobile app (Android·iOS)
   (provided with OMS mobile app or library)
- · Acquire 'OMS Watermark' displayed on printout and monitior screen

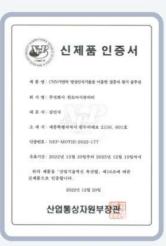


# Certifications

### **Product Certificate**



OMEYE v1.0 Excellent Product of Public Procurement Service



OMEYE v1.0 New Excellent Product (NEP) Certification



OMEYE v2.0 Innovative Product Certificate



OMEYE v1.0, MissingMom v1.0 Innovative Product Certificate



OMEYE v1.0 KISA K-ICTC Certificate (Loitering, Intrusion, Abandonment)



OMEYE v1.0 KISA K-ICTC Certificate (Loitering, Intrusion, Falldown)



OMEYE v1.0 KISA K-ICTC Certificate (Loitering, Intrusion, Queueing/Counting)



OMEYE v1.0 KISA K-ICTC Certificate (Loitering, Intrusion, FireDetection)



OMEYE v1.0 Excellent Information Security Technology Certificate



OMEYE Smart City Platform TTA Certificate



OMPASS v1.0 FIDO Alliance International Certification



OMPASS v1.0 Cloud Computing Certification



OMFACE v2.0 KISA K-NBTC Certificate



OMFACE v1.0 KISA K-NBTC Certificate



OMEYE v1.0 TTA GS 1st Grade Certificate TTA GS 1st Grade Certificate



OMPASS v1.0



My PC Protector 4.0 TTA GS 1st Grade certificate



OMS Secure Print v1.0



OMS Code v1.0 TTA GS 1st Grade certificate TTA GS 1st Grade certificate TTA GS 1st Grade certificate



S-Capsule v1.0

# **Company Certificate**



**Excellent Technology Evaluation Company** Certificate



Venture Company Certificate



G-PASS Company Certificate



Start-up Company Certificate



Inno-Biz Certificate



**Direct Production Confirmation** Certificate



KRX Startup Market(KSM) Certificate



Corporate Research Institute Accreditation

# **Awards & Registrations**



Minister Award of the Ministry of Science and ICT (Excellent Company 2024)



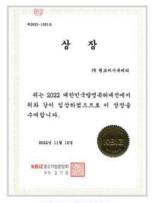
Minister Award of the Ministry of Commerce Industry and Energy (Contribution to national industrial development (Information Security Merit) through commercialization of new technologies)



Minister Award of the Ministry of Science and ICT



Minister Award of the Ministry of Science and ICT (Information Security Product Innovation Contest)



KINPEX 2022 KBIZ Awards Winner



Minister Award of the Ministry of Science and ICT (Excellent Company 2022)



WSCE 2022 Awards Winner



Gangseo-gu Smart City Idea Competition Awards Winner



Copyright Registration



**OMEYE Smart City Platform** Copyright Registration



OMEYE v2.0 Copyright Registration



OMEYE v1.0 Copyright Registration



OMS Secure Print v1.0 Copyright Registration













OMS Code v1.0 S-Capsule v1.0 MyPCProtector 4.0 MissingMom v1.0 OMPASS v1.0 OMFACE v1.0 Copyright Registration Copyright Registration

# Patents

Madian	Nama of invention D	ogistration Number
Nation	Name of invention Re	egistration Number
Germany	Device and Method for Providing Missing Child Search Service Based on Face Recognition Using Deep Learning	11 2021 004 252.1
Germany	APPARATUS AND METHOD FOR TRACKING MISSING PERSON BASED ON ATTRIBUTE	11 2022 000 061.9
Republic of Korea	APPARATUS AND METHOD FOR TRACKING MISSING PERSON BASED ON ATTRIBUTE	10-2022-0147011
PCT	APPARATUS AND METHOD FOR TRACKING MISSING PERSON BASED ON ATTRIBUTE	PCT/KR2022/017439
United States of America	APPARATUS AND METHOD FOR TRACKING MISSING PERSON BASED ON ATTRIBUTE	18/009,560
UK	APPARATUS AND METHOD FOR TRACKING MISSING PERSON BASED ON ATTRIBUTE	2218660.5
Republic of Korea	Al-based illegal parking management method and device	10-2022-0120845
UK	Device and Method for Providing Missing Child Search Service Based on Face Recognition Using Deep Learning	2213332.6
PCT	Method and apparatus for providing personal protection alarm	PCT/KR2022/006361
Republic of Korea	Method and apparatus for providing personal protection alarm	10-2545383
United States of America	Apparatus and method for providing missing child search service based on face recognition using Deep-Learning	17/606,590
Republic of Korea	Server for tracking missing children and deep learning based tracking method for moving routes of missing children from its server	10-2305038
PCT	Apparatus and method for providing missing child search service based on face recognition using Deep-Learning	PCT/KR2021/010589
Republic of Korea	Server for tracking missing children and deep learning based tracking method for moving routes of missing children from its server	10-2270899
Germany	Method and apparatus for preventing illegal outflow of electronic documents	15171427.6
Republic of Korea	Method and apparatus for video recognition	10-2020-0064978
Republic of Korea	Method and apparatus for registering face and pose for face recognition	2018-0146791
Republic of Korea	Method and apparatus for preventing illegal leakage of electronic documents by self-response	10-1781970
United States of America ex	Information insertion method, information extraction method, and information ktraction device using point-based information that are strong against geometric distort	9710872 tion
United States of America	Method and apparatus for preventing illegal outflow of electronic documents	14/736144
Republic of Korea	Method and apparatus for preventing illegal leakage of the electronic documents	10-1599740
Republic of Korea	Method and apparatus on removable storage medium control for preventing data leakage	10-1460297
Republic of Korea	Method and apparatus for checking PC security	10-0961180
Republic of Korea	Method and system for checking PC security	10-0862617

