Visual-AI Foundation Platform enabling comprehensive use case Automation

WildAI – Patented Technology

Wildfaces.ai

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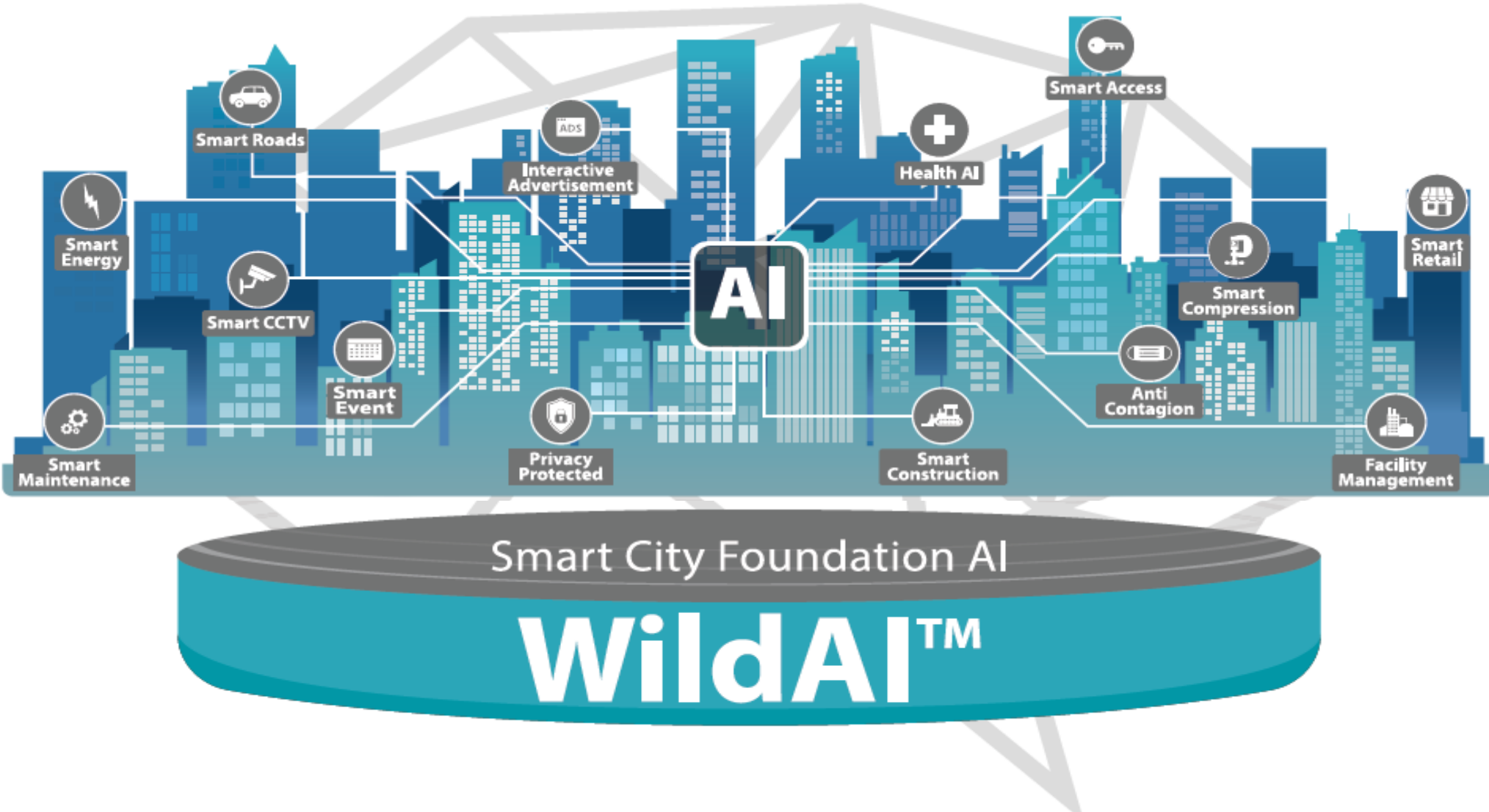
Automation with WildAI™
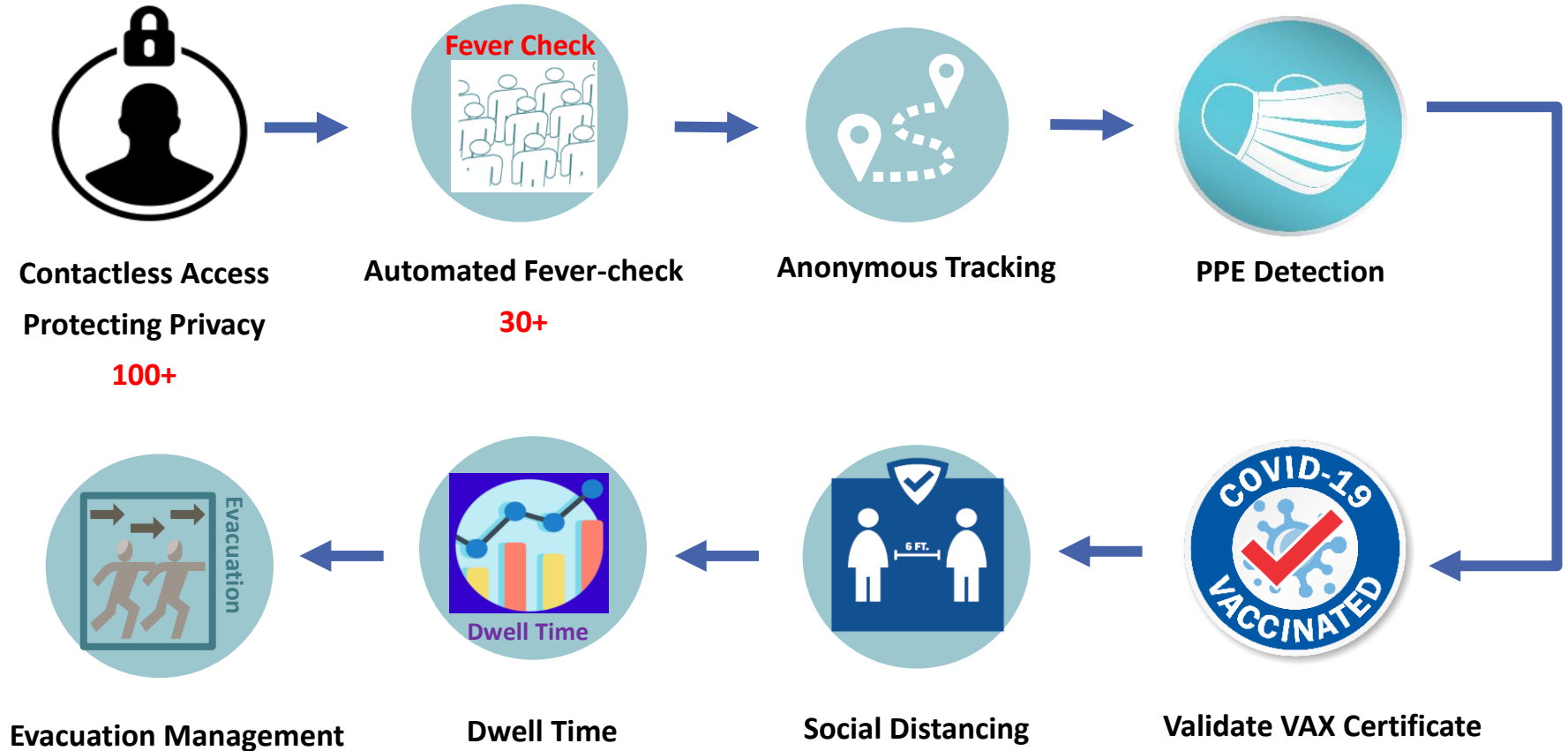
300+ Ready Visual AI Modules

Vision:

WildFaces.ai strives to become the core visual AI platform provider helping leading organizations in key industries to establish on which they can develop different use cases automating their various time-consuming manual processes.

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Foundation AI Platform for KEY Industries

Smart Roads

Smart Energy

Smart CCTV

Smart Event

Smart Maintenance

Interactive Advertisement

ADS

Privacy Protected

AI

Health AI

Smart Access

Smart Construction

Anti Contagion

Smart Compression

Smart Retail

Facility Management

Smart City Foundation AI

WildAI™

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Award Winning Automatic Anti-Contagion Suite

Contactless Access Protecting Privacy

100+

Automated Fever-check

30+

Anonymous Tracking

PPE Detection

Evacuation Management

Dwell Time

Social Distancing

Validate VAX Certificate

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Works well UNIQUELY for Extreme Crowds

✓ **Large crowd analytics**

✓ **Higher visual coverage**

✓ **Accurate & Successive Fever Scanning**

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Global Recognition & Project Reference

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Recognitions & Achievements

Recognized by AI Technology Leaders Globally

18'May
Won the prestigious Hong Kong Smart City Award for its "Outstanding Smart Recognition and Tracking System" by ETNet

18'Oct
Winner of the Hong Kong Science and Technology Park's Elevator Pitch under Smart City category.

19'Jul
Awarded the top project in the "Straight To Wuzhen" contest during the World Internet Conference.

20'Sep
Top 3 winners selected for "She Loves Tech" Competition.

20'Dec
Winner of Innovation Award "Anti-Contagion Suite" By HK Computer Society

2018

2019

2020

2021

2022

18'Mar
Successfully registered the "on-the-move" recognition patent.

18'Jun
Awarded the best technology presentation at the Create @Hong Kong Smart City Contest by Alibaba & Deloitte.

19'Mar
Awarded the best technology presentation at Start-up Pitch Day organized by the Hong Kong Cyberport

20'Jan
On-The-Move Patent Granted

3X **(Nov 2019, 2020, 2021)**

Gartner

Tops Gartner's list as "Most Comprehensive AI supplier" TWICE against 97 multi-national companies

21' Dec
WINNER APICTA 2020-2021 MALAYSIA
MERIT APICTA 2020-2021 MALAYSIA

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WildFaces' Worldwide Reference

**200 Construction Sites
15 Larsen & Toubro facilities**

India

Air Force Hospitals

Indonesia

Samsung Facility
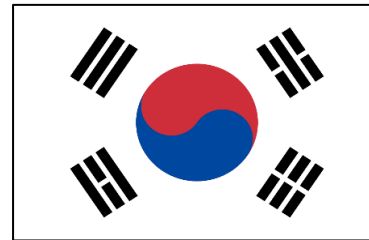
Korea

Saudi Telecom Company

Saudi Arabia

Telecom Italia

Italy

Exponential-e Data Centers

UK

**LAX
Conure Networks Facility**

USA

MORE +++

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Trusted by public sector clients

Successfully delivered projects for:

香港懲教署
HONG KONG
CORRECTIONAL SERVICES

機電工程署
EMSD

Cyberport 數碼港

運 輸 署
Transport Department

MTR

and more...

Penetrating the private sector

Engaged for proof-of-concept projects &
establishing strategic alliance with:

CAFÉ DE CORAL 大家樂

QIB المصرف

UNIVERSITY OF
SAN FRANCISCO
CHANGE THE WORLD FROM HERE

TheONE

Suntec
SINGAPORE
Convention & Exhibition Centre

THE
DUBAI
MALL

and more..

Successful Deployments

- **Highly Trusted by Public Sector**

- **Able to achieve their high Accuracy & Privacy Requirements**

3. Our Algorithms & Differentiators

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Who is WildFaces?

WildAI™

Used By 75 Smart Cities

International 70 Patents Patents

300+ Proven Use Cases

Top Gartner's Global list TWICE

MADE IN Hong Kong 香港
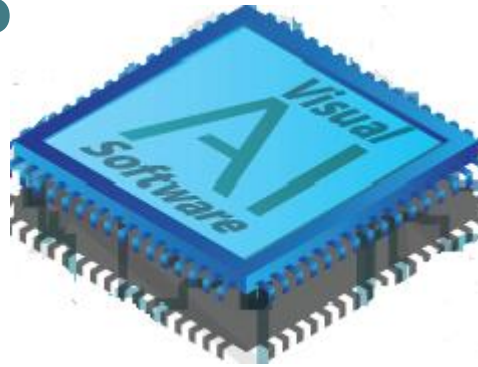
Owns core AI Algorithms;

Expandable to cover comprehensive industry use cases

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WildAI™ - Practical AI Approaches

- **Better emulate multi-faceted human intelligence able to cope with real-life complexities & extreme crowds**
- **300 Ready & Proven AI modules including patented capabilities**
- **Requires NO/ Limited Data Training**
- **Self-Developed Training Engines requiring 50 samples (others will need at least 20,000)**

Hybrid AI

NO Data Annotation

Quick Deployment

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WildAI™ - Wider use-case for "wildly-complex" scenes

Generation 3
WildAI™ ← [Patent #: HK1261909 01/2020]

Generation 2
ReasoningAI

Generation 1
Deep Learning

High

Level of Intelligence

Video Tool for Moving IoTs

Provide ReasoningAI for moving scenes and in dynamic and realistic situations

Video Tool mimicking Complex Human Intelligence

Provide Behavioral Analytics & Anonymous Tracking for fixed scenes

Image Tool mimicking Human Memory

Categorize & segment each single image

Low

Latest of vision-based AI

-- Wildfaces.ai offers FULL coverage of ALL of the above capabilities --

Vision-based artificial intelligence has undergone continuous development, its capabilities have expanded from single to multiple matching targets and from static to On-The-Move analytics. Wildfaces.ai is now giving the world of visual AI a new dimension from fixed cameras to moving IoT devices. This proprietary "on-the-move" technology is patented & made-in-HK by Wildfaces.ai in Hong Kong SAR. Our development team is continuously improving the accuracy and response time of the models.

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Unaffected by the Sino-US Trade War Sanction

Patented & Made-in-Hong Kong core visual AI algorithms

Wildfaces.ai self-developed all core algorithms from scratch. Currently, these are now running on Intel processors but remain open to others. We can license our unique technology worldwide.

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Comparison between Deep Learning & WildAI™

Get Data **1**

Clean, Prepare & Manipulate Data **2**

Train Model **3**

Test Data **4**

Improve **5**
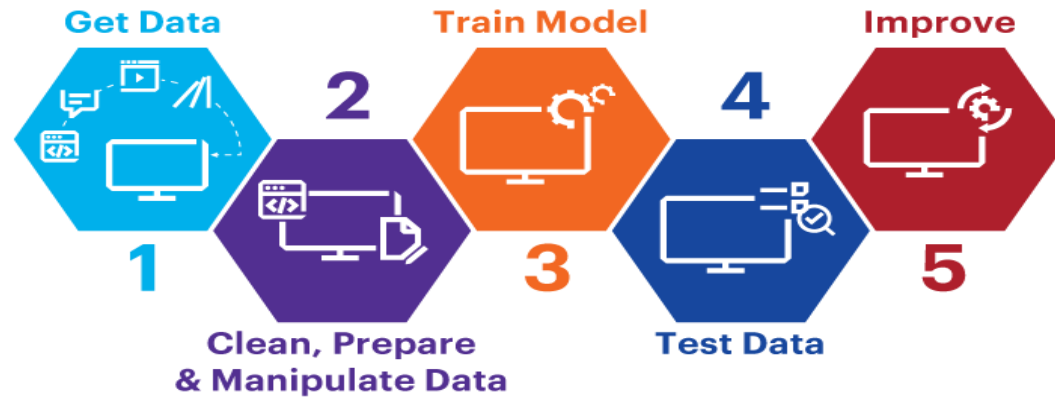
Steps	Deep Learning Process	WildAI™ (hybrid AI) Process
1	Requires good quality images with sufficient #/types of samples. Eg. 10,000 to 50,000 images per object type to return a reasonable result	Ready Algorithm ingests realistic/ low resolution video & automatically decode the video into frame by frame images.
2	massive manual data annotation processes. E.g. image selection, cleaning & cropping	Ready Algorithm to select, crop, detect & classify target images/section automatically in the video.
3	Massive data training of at least 10,000 – 50,000 images are required for each type of Deep Learning engines	Proprietary Training engine requires only 50 images
4	repeat ALL the above steps if the camera view has changed	Adaptable to any new camera view requires no re-training 90% of the cases.
5	Repeat all of the above steps to fine tune the system	Just need to test different day & night data to make sure the system can cope with realistic scene

Proven Case

Hong Kong Transport Department (HKTD)

Detect Pedestrian Trespassing in extreme environment

Major Detection Targets:

Pedestrian **Illegal Parking** **Left Objects**

Benefits:

- Prevent Accidents; Improve Road Safety;
- Eliminate unnecessary traffic congestion

Key Challenges:

Extreme weather (e.g. glare, lightning, rainstorm, typhoon)

Light CPU usage due to limited power supply at the lamppost

Results Achieved by Wildfaces.ai

- 19 out 19 results incidents detected with only 1 false alarm during black rain & signal 10 typhoon in the first month of deployment;
- Go-live within 8 weeks and ready for multi-site deployment.

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Proven Case

Hong Kong Correctional Services Department (HKCSD)

Visual Analytics with NO Data Training

Major Detection Targets:

Suicidal Acts	Collapse; Slip & fall	Fighting

Benefits:

To protect HKCSD's officers to be charged for negligence for inmates' injuries or deaths.

- -

Key Challenges:
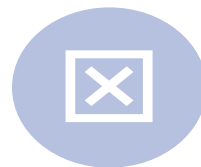
No past data available for machine learning	Constant Background changes
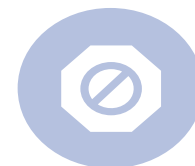
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Results Achieved even with Extensive Use cases

- Delivered 28 out of 30 use-cases with only 3 false alarms during lengthy 3-month POC stage;
- R&D works are required for the remaining use cases
- Go-live within 12 weeks and featured on various media, e.g. SCMP, MingPao etc. See media link here

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How to Start Visual AI Project?

Proven Processes to ensure successful implementation

1. Determine customer's Wish List and Priorities
2. Choose the right applications, software and systems that meet your requirements.
3. Agree with the required processes & operational approach (e.g. manual or automated responses)
4. Design the system including camera selection/placement, network design etc
5. Implement with knowledge (including proper training).

* If you implement the system without planning for your analytics it will cost a lot to retrofit it later.

How to select VA Supplier?

Capabilities	iOmniscient/WildFaces	Other Suppliers
# of Commercial Experience in Analytics	A spin-off from 20 years long Visual AI company, iOmniscient (www.iomni.ai)	?
Track Records	Successful 75 smart City projects including many railway	?
Patents in Crowded and Complex scenes	70 international patents	?
Comprehensive Capabilities	Multi-sensory Analytics (video, Sound and Smell)	?
Solved Customer Problems – Use Case Basis Approaches	Plenty of Smart city/Railway use cases	?
References	Many – see our partial reference list	?
Design Assistance offered to Customers	Yes – to many…	?

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Smart Retail: Use Case Examples

OPERATIONAL EFFICIENCY

Understand customers including visiting patterns, demographics, individual or average dwell times for shoppers (excluding passers-by)

Use the above information to tailor advertisements and schedule staff accordingly

Understand footfalls of regular shoppers, non-regular shoppers, and VIPs,

Understand Shoppers' interest in certain merchandise (e.g. how many times this item has been picked up)

Turning traditional digital signage or LED display into interactive addressing approaching shoppers' profiles based on their demographic information

HEIGHTEN SECURITY

Find lost children/elderly in a large retail environments

Enhance access control – DriverMatch combines license plate recognition with facial recognition as additional authentication layer to prevent unauthorized entry

Anonymous Tracking for shoplifters upon missing objects

Interface with point-of-sale system to prevent fraud (e.g. cash register left open for too long)

Identify trespassing and tailgating in restricted areas

Real time alerts for theft and vandalism detection of expensive displays

ENHANCE SAFETY

Raise real time alerts for slips and falls

Raise real alerts for any water spills and abandoned objects at the emergency exits

Give warnings for overcrowding to comply with maximum occupancy regulations

Perform video based smoke and fire detection for high ceiling/outdoor environment

Detect children playing near escalators/high floor barriers

Real time alerts for sudden crowd formation / dispersal to prevent stampede
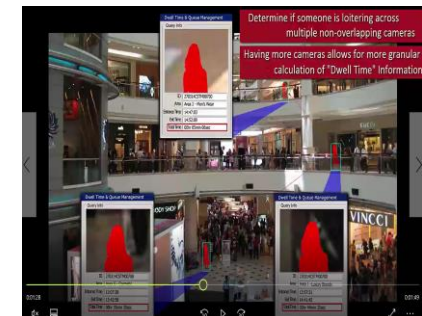
Smart Manufacturing: Use Case Examples

Operational Efficiency
Raise an alert if a piece of machinery needs repair or replacement
Track the location of important equipment
Raise an alert for suspicious behaviors or machine stoppage at the assembly line
Alerts for illegal parking incidents at the facility ensuring smooth & safe access for other vehicles

Enhance Security
Detect and prevent theft in the stock room that is keeping expensive goods & materials to avoid any delay of the work progress
Ensure authorized access 24x7 preventing any intrusion and able to highlight and preventing repeating intruders from entering.
Surveillance System HealthCheck: Alert for camera tampering or sabotage

Ensure Safety
Video based early smoke and fire detection for outdoors and high ceiling environments
Understand occupancy to facilitate evacuations in case of emergency
Prevent tailgating by auto-authenticating access control
Smell Analytics – Detection of hazardous substances (odor/poisonous gases)
Sound Analytics - Detection of loud noises/explosion
Promote worker safety by checking for proper PPE, safety vests, etc
Real time alert of any slips or falls incidents

Smart Warehouse: Use Case Examples

Operational Efficiency

Automate the pickup and drop-off process for regular drivers

Automate the loading process, ensuring loading the proper number of pallets

Prohibit entry of overloaded or oversized vehicles

Establish quarantine control using our video based Fever Check

Ensure the end of the queue (truck queuing line) is not blocking the traffic on the road

Enhance Security

Provide double authentication with facial recognition for faster check-in and fraud prevention, even in large groups. It also works for vehicles using License Plate Recognition or DriverMatch.

Ensure no stealing at the loading docks or temporary storage areas - Detect and prevent theft of expensive goods. Alert if suspects/known thieves are spotted.

Surveillance System HealthCheck: Alert if a camera is tampered with or sabotaged

Ensure SAFETY

Track the location of forklifts

Equipment operation safety (e.g. ensure no one can go near moving forklift or beneath a moving crane)

Ensure workers follow warehouse safety guidelines e,g using a crosswalk on a busy road

Extra big truck cannot enter a small road or going wrong way

Logistic Management: Use Case Examples

Distribution Center Management (ensuring fast check-in & operational efficiency)
Auto Check-in with DriverMatch (e.g. matching Responsible Driver and vehicle plates)
Expedite check-in time for regular users (e.g. auto-fill paper works including Auto-validation of containers & any barcoded merchandise)
Fast Clearance & Quick Turnover at the loading docks particularly for frozen foods that will require immediate refrigeration - Auto detect the arrival of Truck; - Auto-opening and closure of door not to waste energy particularly accessing the cold room - Auto-allocation of first available loading dock - Auto count of # of loading pallets - Interface with scale to record the weight of each pallet
Ensure staff productivity eliminate unnecessary bottlenecks due to prolonged smoking breaks
Auto-detect of extra-long queuing time & to notify for opening more service counters

Automated Facility Management using WildAI™

click here for youtube video demo →

Personalized Experience

Optimal Energy Management

Anti-Contagion

Optimal Utilization ensuring utmost income

Automatic Facility Booking

Way-finder & Anonymous Tracking

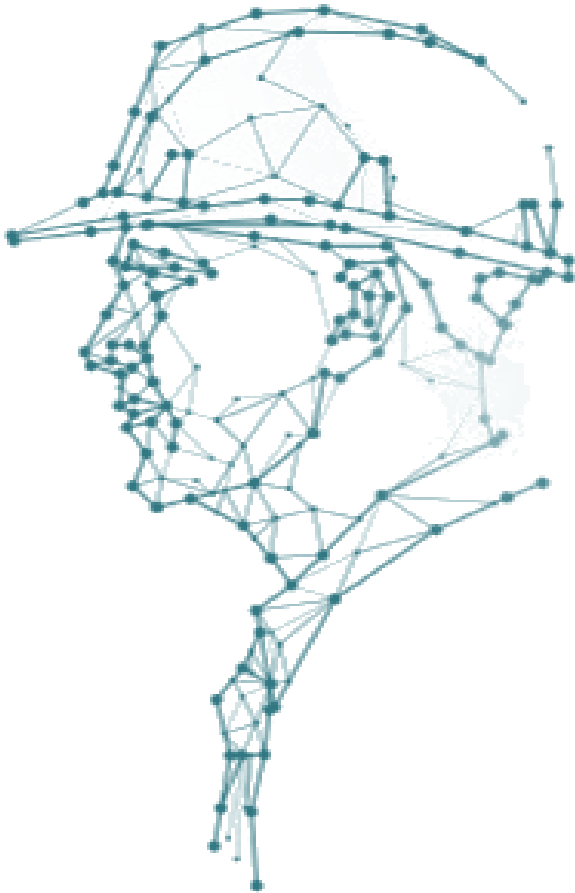**Accurate On-the-move Access Control**

Automated Response for Emergencies

- For tenants / visitors
- For landlords
- For operation

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Preventive Maintenance using WildAI™

click here for youtube video demo ➡

Autonomous Site Management
- Automating tedious manual inspections
- Smart Maintenance removing human checks & maintenance
- Automatic Analyzing of work progress
- Managing visitors, staff & sub-contractors access

Safety Compliance
- Ensure PPE & safety gear compliance
- Automatic Anti-Contagion measurement
- 3-3-3 rules with crane operation
- Immediate Alert of any accidents – eg. Slip & fall, leakage & smoke and fire

Automated Asset Management
- Analyzing asset utilization & staff productivity
- Immediate Alert of unauthorized access 24x7
- Immediate Alert of improper behavior (eg. Missing materials)

Enhanced Security with AI
- Alert for aggressive behavior (e.g. fighting)
- Alert for equipment tempering and sabotage
- Prevent unauthorized access and frauds particularly after-hour

and more...

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We would like to offer your organization our core AI engine helping you to automate many more of your time-consuming processes

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Thank you!

Contact Us

bd@WildFaces.ai

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More Youtube video demos:

Dwell Time & Demographic Analytics [demo video](#)

Automated Facility Management [demo video](#)

Smart Traffic [demo here](#)

Smart Maintenance [demo here](#)

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