

WORLD'S LEADING AI ENGINE BUILDERS

VAIDIO

AICUDA TECHNOLOGY & IRONYUN

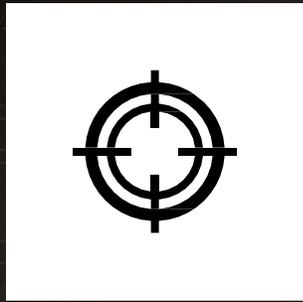


ANALYTICS FOR A SAFER WORLD



AICUDA
TECHNOLOGY

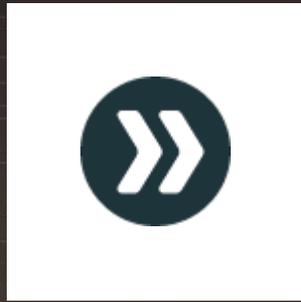
IRONYUN™



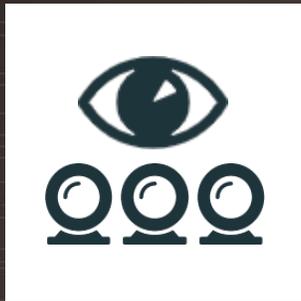
ACCURATE
ALERTS



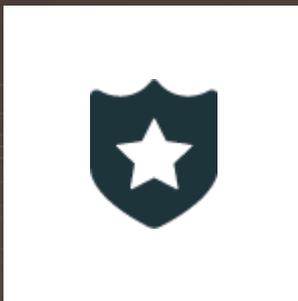
MAXIMIZED
EFFICIENCY



FAST
VIDEO SEARCH



AI-ENABLED
ANALYTICS



COMPREHENSIVE
FUNCTIONALITY

VERSATILE

More analytics than any alternative

FAST

Search days of video in minutes

ACCURATE

Reduce false positives by orders of magnitude

IMMEDIATE

Real-time alerts in 3 seconds or less

INTELLIGENT

Natural-language search across multiple objects

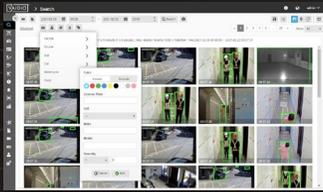
OPEN

Integrate with 97% of ONVIF devices

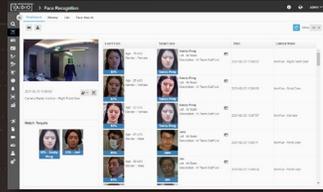
IMPACTFUL

Increase alert readiness, improve productivity

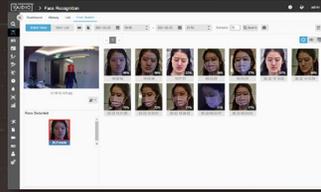
REAL-TIME AND FORENSIC AI ANALYTICS



Video Search



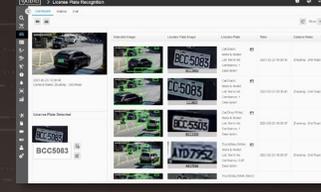
Face Recognition



Face Search



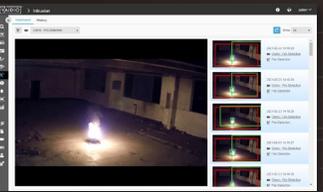
ID Verification



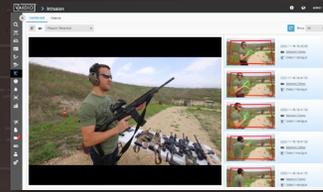
License Plate Recognition



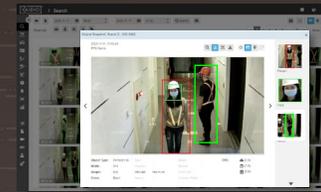
Intrusion Detection



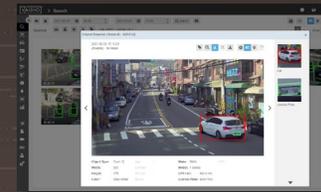
Fire Detection



Weapon Detection



PPE Detection



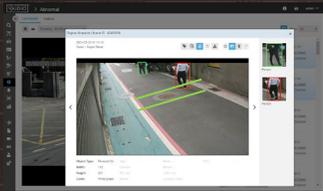
Make & Model



People Counting



Vehicle Counting



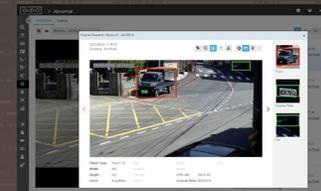
Wrong Direction



Loitering



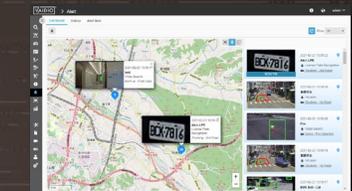
Person Fall



Illegal Parking



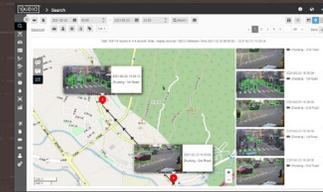
Object Left Behind



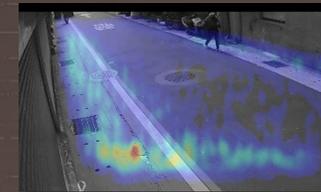
Real-time Alert



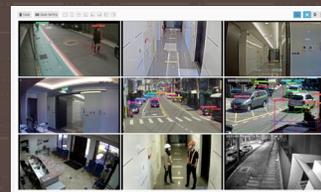
Social Health



Map Tracking



Heatmap



Liveview

PORTS
AND
TERMINALS



AICUDA SMART ANALYTICS FOR PORTS & TERMINALS



VIDEO SEARCH

ENFORCEMENT

- › Identify persons & vehicles
- › Multiple camera search
- › Color search
- › Quantity search



FACE RECOGNITION

ACCESS CONTROL

- › Face search
- › Blacklists / whitelists
- › Detect multiple persons
- › Detect face similarities



INTRUSION DETECTION

ENFORCEMENT

- › No false alarms
- › Multiple ROI's
- › Perimeter detection
- › Restricted area protection



LICENSE PLATE RECOGNITION

ACCESS CONTROL

- › Read license plates
- › Track stolen vehicles
- › Detect permit holders
- › Improve site security



ILLEGAL PARKING

ENFORCEMENT

- › Parking access availability
- › Find vacant parking spots
- › Park in restricted zones
- › Manage incidents



VEHICLE COUNTING

INFRASTRUCTURE

- › Optimize traffic flows
- › Statistical traffic reporting
- › Reduce pollution
- › Infrastructure planning



PEOPLE COUNTING

INFRASTRUCTURE

- › Control visitor flows
- › Occupancy rate
- › Queue detection
- › Detection of peak hours



LOITERING DETECTION

ENFORCEMENT

- › Detects suspicious behavior
- › Unauthorized presence
- › Analyze movements
- › Prevents crime



WEAPON DETECTION

SAFETY

- › Detect guns, rifles & knives
- › Fast response to danger
- › Active shooter detection
- › Prevent violent crime



FIRE DETECTION

SAFETY

- › Fast smoke & fire detection
- › Prevent property damage
- › Guaranteed fire safety
- › Quick response save lives

EMPLOYEE SAFETY



Uniform recognition



Glove usage



People Counting



Person Smoking



Helmet usage



Fall Detection

PERIMETER SECURITY



DRAW REGIONS OF INTEREST (ROI) WITHIN THE COVERED PORT AREA PERIMETER TO CREATE A VIRTUAL FENCE AND RECEIVE ALERTS WHEN HUMANS ENTER THE CAMERA FIELD OF VIEW

DETECT ABANDONED OBJECTS WITHIN THE COVERED PORT AREA PERIMETER AND TRIGGER AN ALERT

DETECT LOITERING AND SUSPICIOUS BEHAVIOR WITHIN THE COVERED PORT AREA PERIMETER AND TRIGGER AN ALERT

DETECT PARKED VEHICLES WITHIN THE COVERED PORT AREA PERIMETER AND TRIGGER AN ALERT

PORTS AND TERMINALS

CONTAINER STORAGE

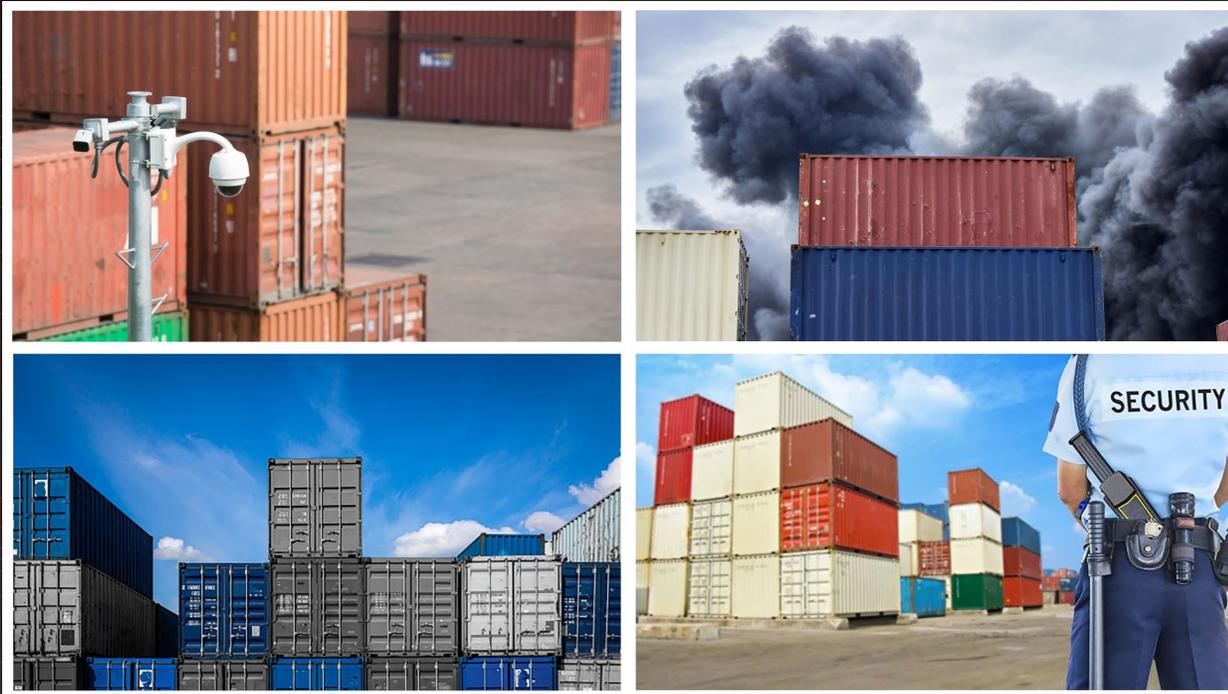
USE FACE RECOGNITION IN COMBINATION WITH ACCESS CONTROL AND WHITE LIST TO UNLOCK CONTAINER STORAGE AREAS FOR AUTHORIZED STAFF

DRAW A REGION OF INTEREST AROUND A CONTAINER STORAGE AREA AND TRIGGER REAL-TIME ALERTS TO GROUND OFFICERS ON MOBILE DEVICES IN CASE OF INTRUSION DETECTION

MONITOR AND DETECT FIRE & SMOKE IN REAL-TIME AND TRIGGER AN ALERT WHEN FIRE OR SMOKE ENTERS THE CAMERA FIELD OF VIEW

MONITOR AND DETECT WEAPONS IN REAL TIME AND TRIGGER AN ALERT WHEN A WEAPON ENTERS THE CAMERA FIELD OF VIEW

MONITOR PEOPLE THAT REMAIN AROUND THE CONTAINER STORAGE AREA FOR A PROTRACTED TIME WITHOUT AN APPARENT PURPOSE (LOITERING)



PORTS AND TERMINALS

PARKINGS



PORTS AND TERMINALS

REGISTER VEHICLE LICENSE PLATES FOR AUTOMATIC ENTRANCE CONTROL

APPLY LICENSE PLATE RECOGNITION AND ENTRANCE CONTROL WITH WHITE LIST FOR RESTRICTED PARKING AREAS

MONITOR PEOPLE THAT REMAIN AT A PARKING FOR A PROTRACTED TIME WITHOUT AN APPARENT PURPOSE (LOITERING)

TRIGGER ALERTS FOR VEHICLES PARKED IN AREAS WHERE PARKING IS PROHIBITED

TRIGGER ALERTS WHEN VEHICLES REACH A CERTAIN (ABNORMAL) PARKING TIME THRESHOLD

MONITOR AND DETECT WEAPONS IN REAL TIME AND TRIGGER AN ALERT WHEN A WEAPON APPEARS IN THE CAMERA FIELD OF VIEW

MONITOR AND DETECT FIRE & SMOKE IN REAL-TIME AND TRIGGER AN ALERT WHEN FIRE OR SMOKE APPEARS IN THE CAMERA FIELD OF VIEW



SUPERVISOR CENTER



PORTS AND TERMINALS

PROVIDE REAL-TIME ALERTS TO RESPONDING OFFICERS ON MOBILE DEVICES IN CASE OF CONTRABAND, CRIME, FIGHTS AND TERRORISM

TRACK TARGET OBJECTS BY EVENT TIME STAMP AND CAMERA LOCATION (MAP TRACKING)

RECEIVE ALERTS AND TAKE ACTION WHEN A CAMERA IS REPOSITIONED, BLURRED OR BLOCKED

UPLOAD IMAGES AND OBTAIN A FULL LIST OF CAMERA FEEDS THAT SHOW INTRUDERS INCLUDING CAMERA POSITION AND TIME STAMP

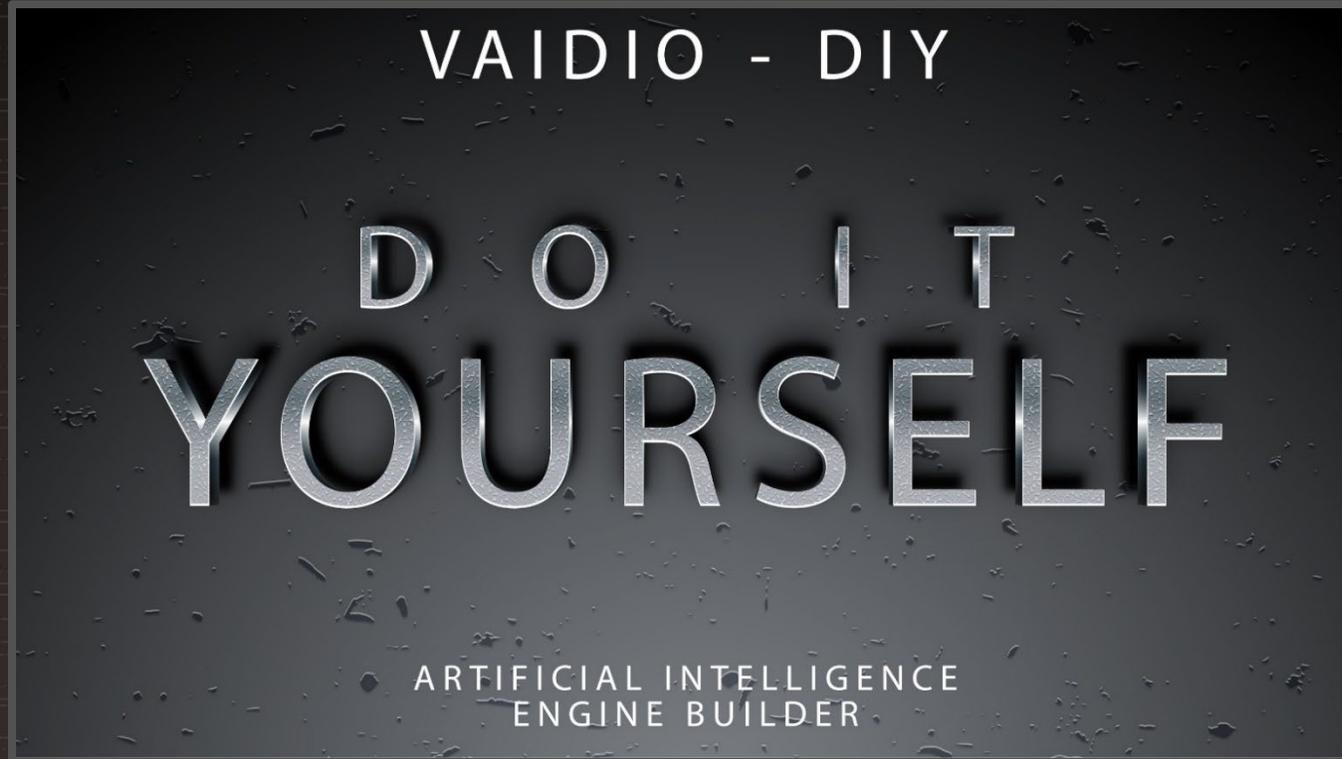
SEARCH CARS BY MAKE AND MODEL

SEARCH THROUGH TERABYTES OF VIDEO IN SECONDS WHEN INVESTIGATING PORT INCIDENTS AND PROVIDE VISUAL EVIDENCE

FORENSIC VIDEO SEARCH TO COLLECT EVIDENCE FOR ABUSIVE BEHAVIOR FROM TRAVELLERS TO BORDER STAFF OR VICE VERSA



VAIDIO TOOL KIT



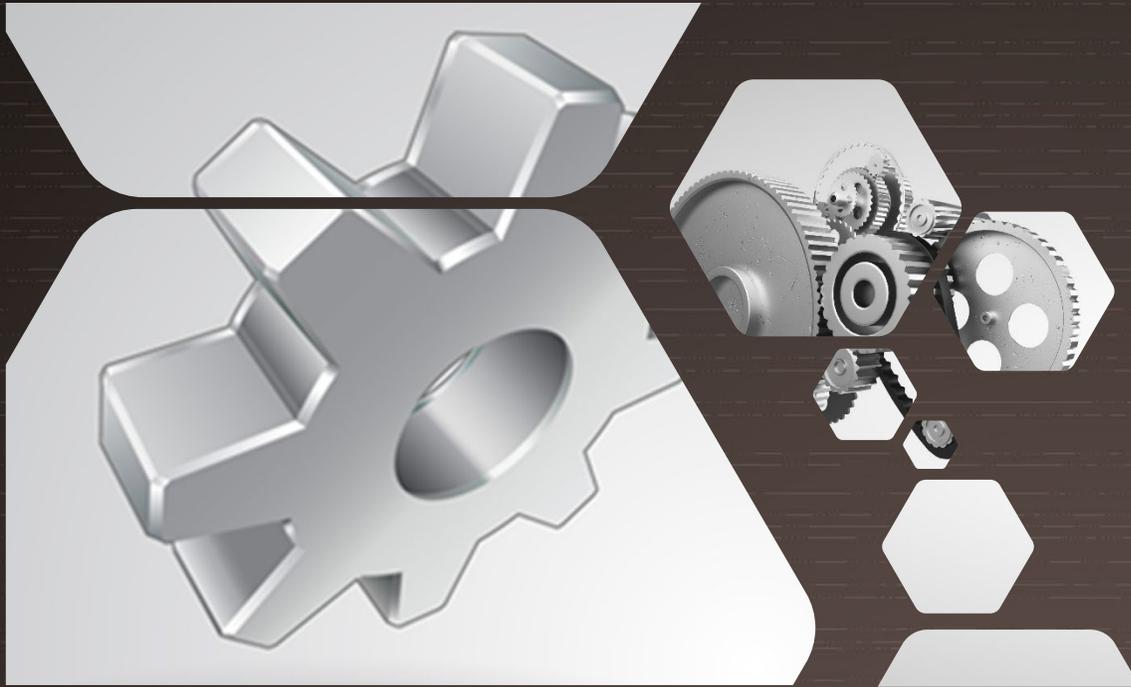
TRAIN YOUR OWN OBJECT
DETECTION MODEL

INPUT: USER SELECTED
FOOTAGE

OUTPUT: READY-TO-USE
AI MODEL



VAIDIO TOOL KIT



ADVANTAGES

EASE-OF-USE

NO KNOWLEDGE REQUIRED AROUND NEURAL NETWORKS, AI LIBRARIES, ALGORITHMS AND DATASETS

VERSATILITY

TRAIN A MODEL FOR ANY OBJECT

INTERFACE

INTUITIVE GRAPHICAL USER INTERFACE

SECURITY

NO DATA SHARING TO 3rd-PARTY LABELLING SERVICES

CUSTOMIZATION

NO CUSTOMIZATION FEE FOR CUSTOMER SPECIFIC REQUESTS



USE CASE 1



CHALLENGE

DETECT CORROSION IN PORT EQUIPMENT

SOLUTION

TRAIN YOUR OWN CORROSION DETECTION MODEL WITH VAIDIO-DIY

BENEFITS

- ❖ PROTECT CRITICAL INFRASTRUCTURE EQUIPMENT
- ❖ GUARANTEE SAFETY OF PORT WORKERS

CORROSION DETECTION



USE CASE 2



CHALLENGE

DETECT DRONE SIGHTINGS OVER
CRITICAL PORT INFRASTRUCTURE
FACILITIES

SOLUTION

TRAIN YOUR OWN DRONE DETECTION
MODEL WITH VAIDIO-DIY

BENEFITS

- ❖ PROTECT CRITICAL INFRASTRUCTURE FACILITIES
- ❖ PREVENT TERRORIST ATTACKS

DRONE DETECTION



USE CASE 3



CHALLENGE

DETECT SURFACE DEFECTS ON VESSELS WITH AI-ENABLED DRONES

SOLUTION

TRAIN YOUR OWN SURFACE INSPECTION MODEL FOR VESSELS WITH VAIDIO-DIY

BENEFITS

- ❖ PREVENT SEVERE ACCIDENTS
- ❖ GUARANTEE THE SAFETY OF CREW AND PASSENGERS

SURFACE INSPECTION VESSELS



INTEGRATION CAPABILITIES



CAMERA INTEGRATION

CLOUD PLATFORM INTEGRATION

ERP INTEGRATION

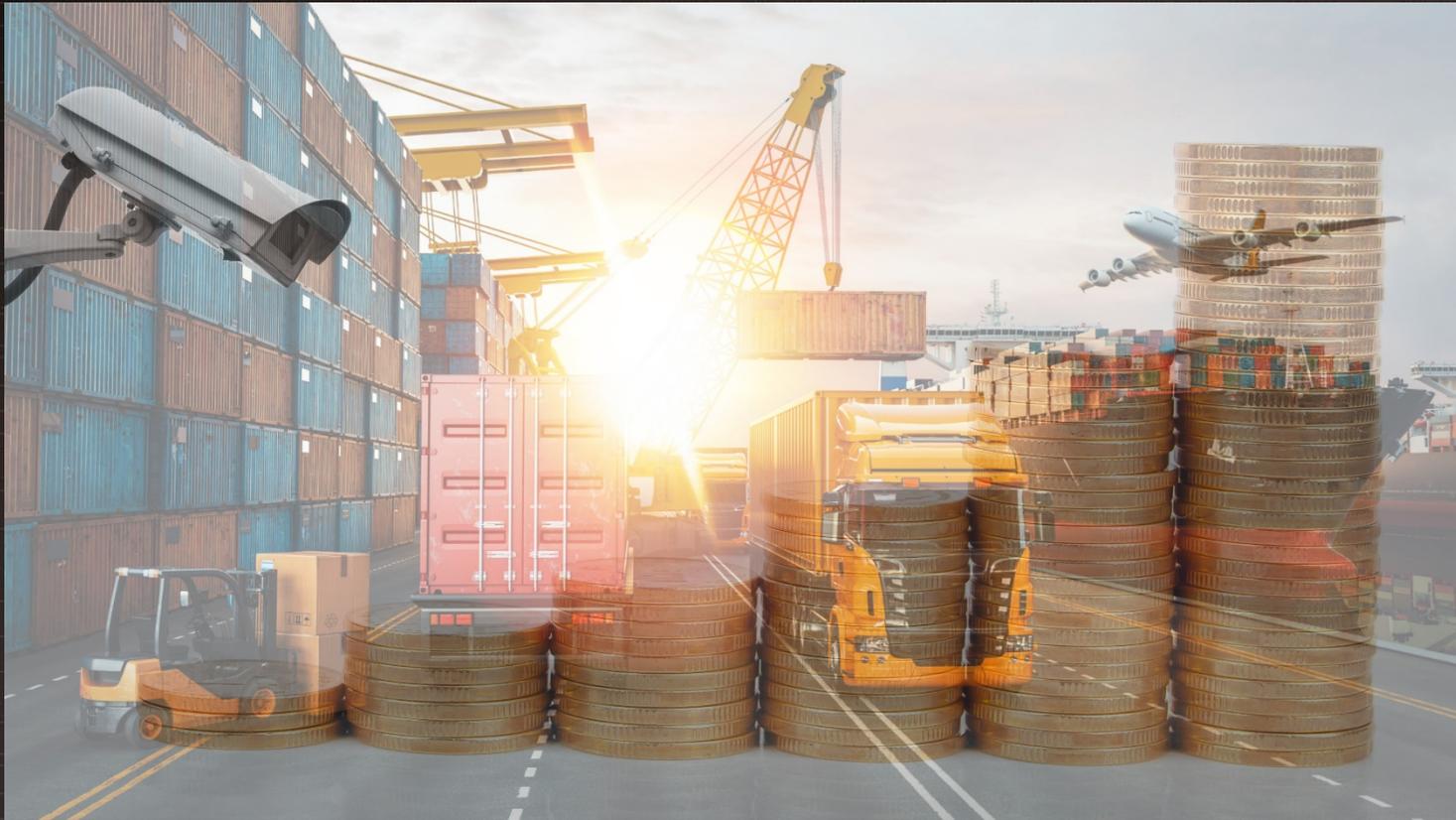


IO DEVICE INTEGRATION

SOFTWARE SERVICES

VMS INTEGRATION

PORTS & TERMINALS



VAIDIO BENEFITS & SAVINGS

VAIDIO AI-ENABLED VIDEO ANALYTICS HELP MAINTAIN THE SAFETY IN PORTS AND GIVE EMPLOYEES PIECE OF MIND

VAIDIO AI-ENABLED VIDEO ANALYTICS PROVIDES ACTIONABLE DATA TO ANALYZE & OPTIMIZE DECISION MAKING AROUND THE PORT INFRASTRUCTURE

REVIEW HOURS OF VIDEO IN SECONDS – INCREASE IN PRODUCTIVITY OF THE MONITORING SECURITY STAFF

REAL-TIME ALERTS AND PRO-ACTIVE FOLLOW UP CAN PREVENT EVENTS FROM HAPPENING – REDUCE DAMAGE

VAIDIO AI-ENABLED VIDEO ANALYTICS WILL REDUCE THE NUMBER OF FALSE POSITIVES TO A MINIMUM – SAVE TIME AND RESOURCES FROM INVESTIGATING FALSE ALERTS

MONITOR MULTIPLE PORTS SITES FROM A CENTRAL LOCATION. PROVIDE REAL-TIME ALERTS TO ON-SITE SECURITY STAFF VIA MOBILE DEVICES

AWARDS

The Challenge

Improve pedestrian safety in container ports and terminals.

The Winner

IronYun and their 'Vaidio' Video Intelligence Platform delivers video analytics solutions for Security, Safety, Access Control and Social Health Screening. Vaidio's 4th generation AI makes video monitoring, security alerts, health screening and forensic investigation more accurate, more automated and more affordable, making businesses safer and more secure. IronYun will now have the exciting opportunity to trial their solution with DP World for up to three months, at one of their ports.



DP WORLD CHALLENGE

**Improving
pedestrian safety
in container ports
and terminals**



USE CASE



[About Us](#) [About Safetytech](#) [Work with Us](#) [Priority Areas](#) [Resources](#) [Contact](#)



Safetytech Accelerator announces collaboration to explore AI as a way to reduce risk in ports

29/06/2021

Safetytech Accelerator is delighted to announce a collaboration with DP World Europe and IronYun to reduce risk in ports through AI video analytics.

Ports are extremely busy places – with cranes, lorries and people in constant motion, the risk of accidents is high. At Safetytech Accelerator, we believe that modern artificial intelligence and machine learning platforms can help reduce this risk, and we're working with two leaders in their respective fields to show how this can be done.



USE CASE

	Features	Available Now
1	Pedestrians entering unauthorized areas	Yes
2	Detect unsafe behavior of workers – e.g. (Trip and fall) and loitering	Yes
3	Pedestrians walking outside of designated area	Yes
4	Pedestrians being present in forbidden area	Yes
5	Pedestrian not wearing protective equipment/right uniform (hard hat, safety vest, mask)	Yes
6	Pedestrians walking behind or outside vehicles	Yes
7	Overcrowded area or group activity	Yes
8	Pedestrians being distracted (e.g. using cell phones)	Yes
9	Monitor in real time for predefined workforce actions and generate alarms for anomaly alerts	Yes
10	Deployable as a pilot within the project	Yes
11	Technology needs to operate with legacy CCTV infrastructure	Yes
12	Technology needs to operate 24 x 7 in all conditions	Yes
13	Technology needs to be scalable	Yes
14	Support live, real-time video data streaming	Yes
15	Support 3rd party cameras and vendors	Yes



WORKING TOGETHER ON THE
ROAD TO A SAFER TOMORROW