

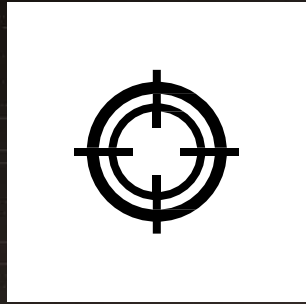
WORLD'S LEADING AI ENGINE BUILDERS

VAIDIO

AICUDA TECHNOLOGY & IRONYUN

# ANALYTICS FOR A SAFER WORLD





**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

# UTILITIES

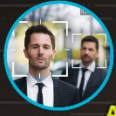




### VIDEO SEARCH

#### ENFORCEMENT

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



### FACE RECOGNITION

#### ACCESS CONTROL

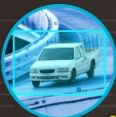
- > Face search
- > Blacklists / whitelists
- > Detect multiple persons
- > Detect face similarities



### 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



# AICUDA SMART ANALYTICS FOR UTILITIES



### 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

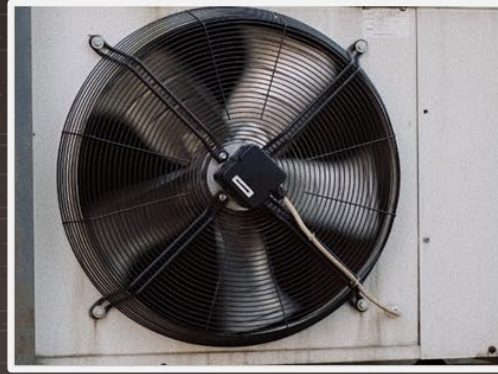
#### SAFETY

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

# EQUIPMENT STATUS



Corrosion detection



Fan status



Needle position / fuel level alarm



Knife switch position

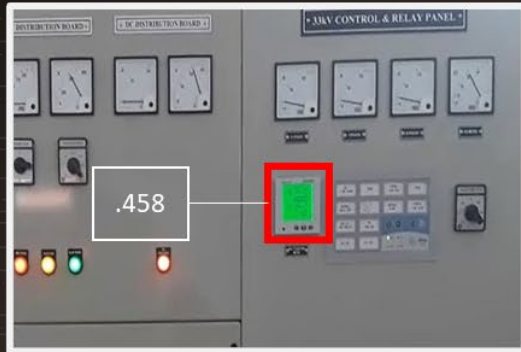


Filter status

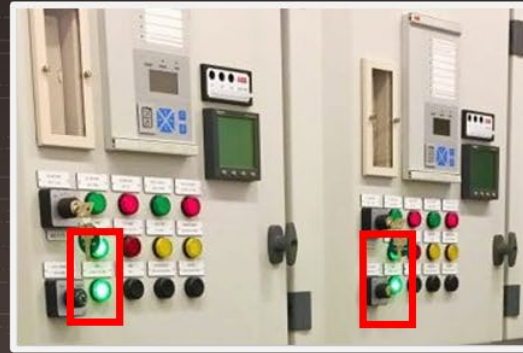


Breaker status

# EQUIPMENT STATUS



Text displayed in a screen (change)



LED status



Oil/water leakage



Spark detection



Temperature detection

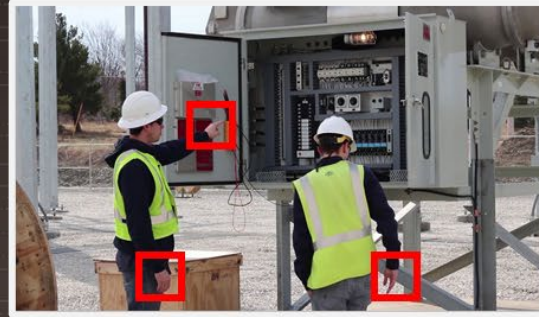


Switch status (on demand or change)

# EMPLOYEE SAFETY



Uniform recognition



Glove usage



People Counting



Person Smoking



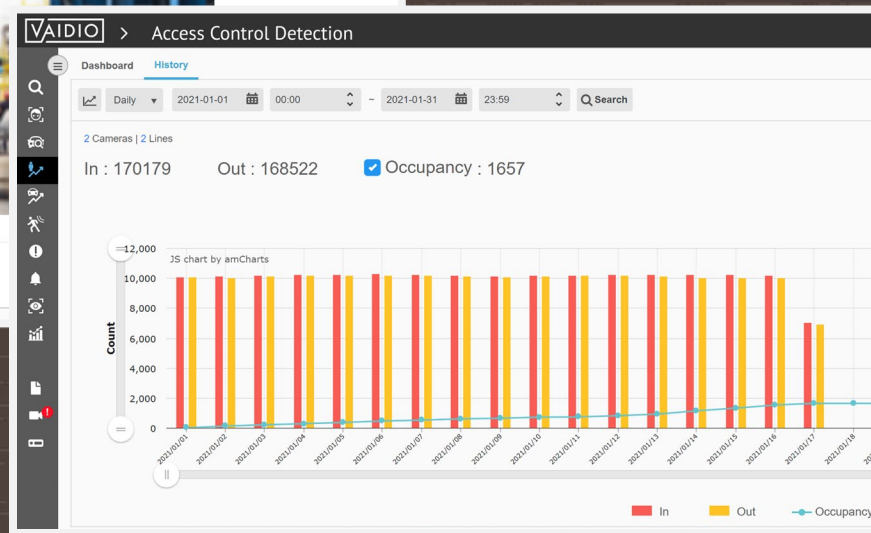
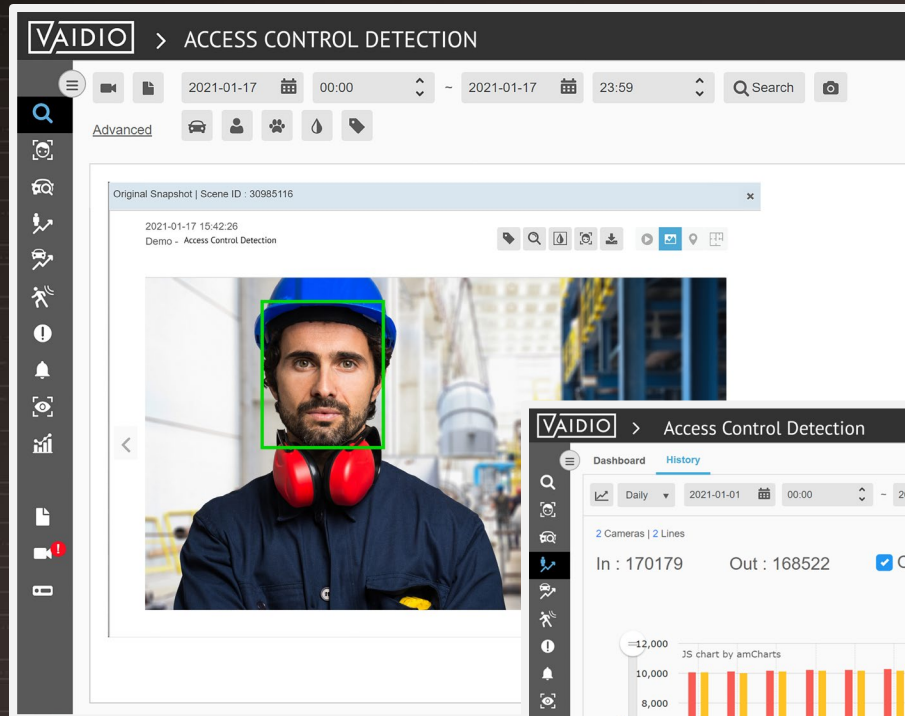
Helmet usage



Fall Detection



# AI-BASED FACE RECOGNITION



INTEGRATION OF VAIDIO AI-BASED FACE RECOGNITION IN ACCESS CONTROL AND HRM SYSTEMS TO UNLOCK PLANT AREAS FOR AUTHORIZED STAFF AND CONTRACTORS

ANALYZE PEOPLE MOVEMENT

GENERATE ACCESS CONTROL REPORTS BASED ON INCIDENTS

# AI-BASED FACE RECOGNITION



NO CONCERNS ABOUT BADGES THAT ARE LOST OR STOLEN AS BADGES ARE NO LONGER REQUIRED

FACE RECOGNITION ACCESS CONTROL PROVIDES ACCESS TO THE WORKPLACE IN REAL-TIME AND PREVENTS FRAUD

TRACK TARGET PERSONS ON A MAP AND PERFORM CONTACT TRACING IN CASE OF ACCIDENT OR INCIDENT

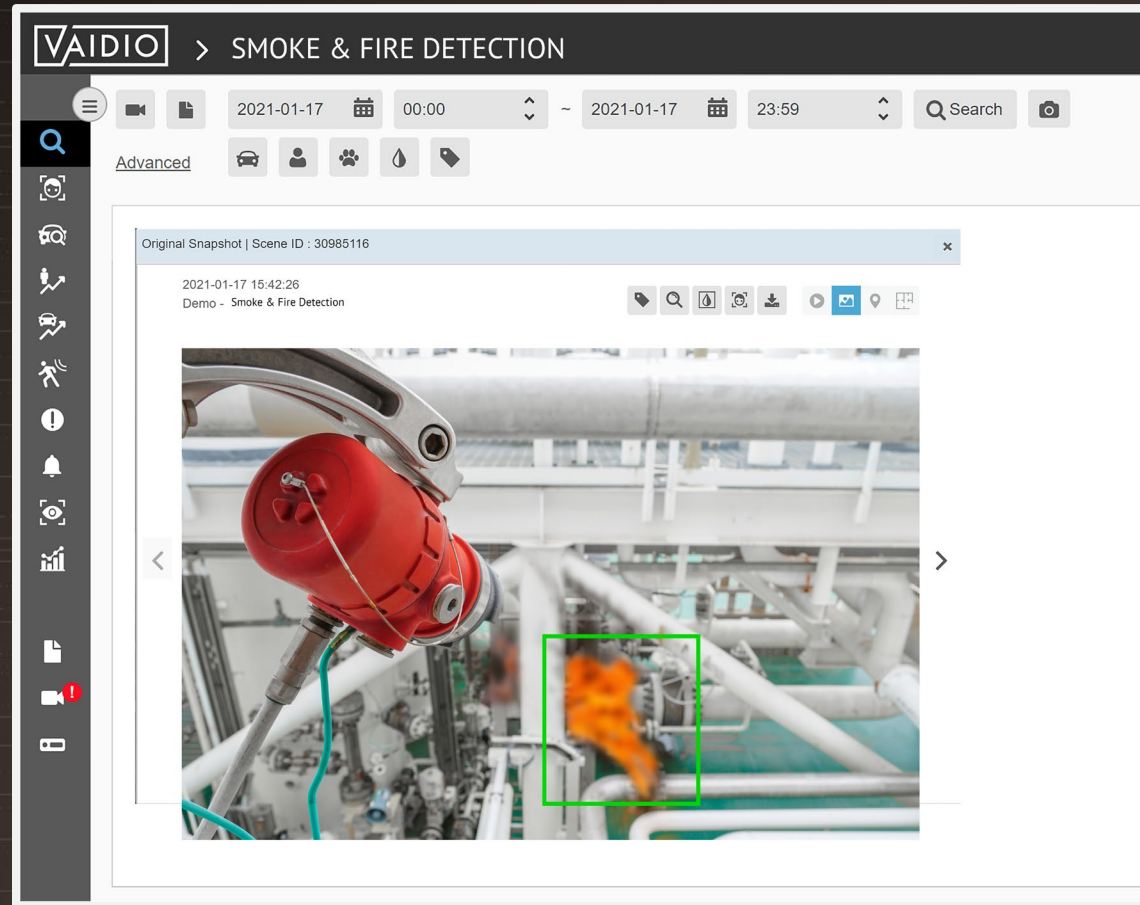
MANAGED FROM A PUBLIC, PRIVATE OR HYBRID CLOUD

EASIER TO MAINTAIN – REMOTE SYSTEM HEALTH MONITORING

## BENEFITS



# AI-BASED SMOKE & FIRE DETECTION



MONITOR AND DETECT SMOKE & FIRE IN AND AROUND THE FACTORY IN REAL TIME

TRIGGER AN ALERT WHEN SMOKE OR FIRE APPEARS IN THE CAMERA FIELD OF VIEW AND PREVENT DAMAGES TO PROPERTY AND ASSETS TO A MINIMUM

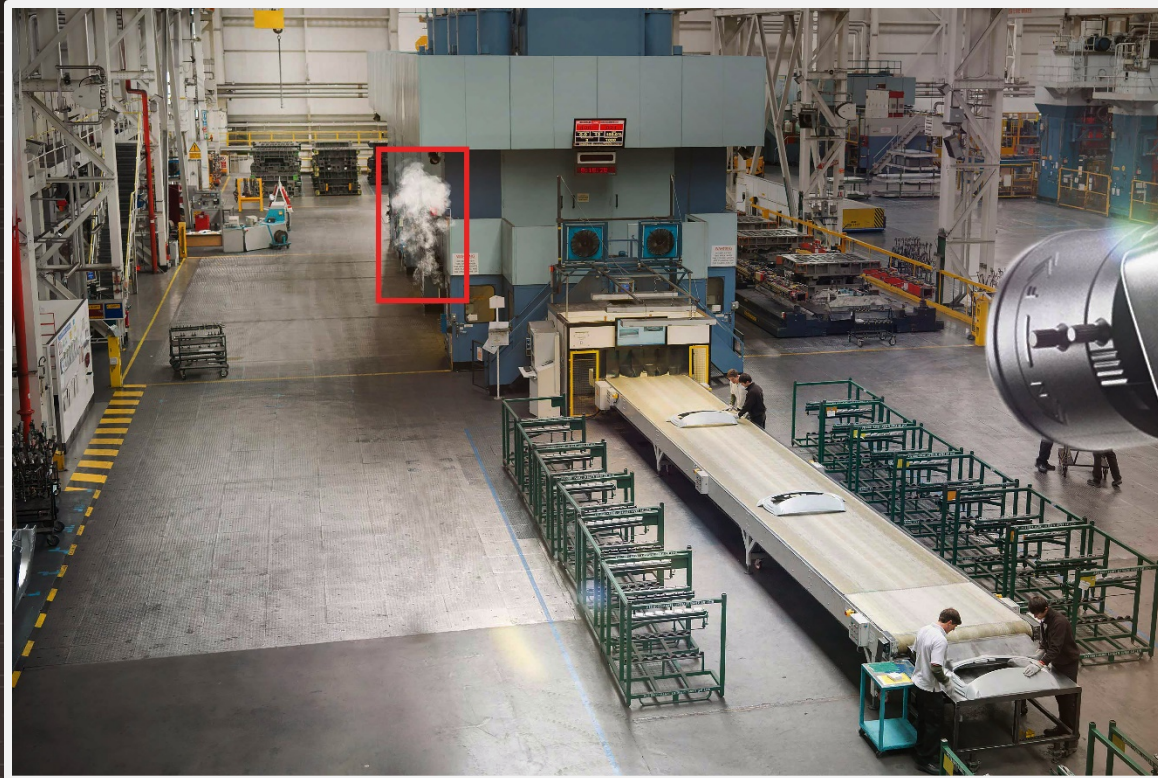
INVESTIGATE VIA VIDEO SEARCH AND PROVIDE VISUAL EVIDENCE FOR INSURANCE COMPANIES.

INTEGRATE VAIDIO WITH THE FACTORY FIRE PROTECTION SYSTEM.

VAIDIO IS ABLE TO SEND OUT ALERTS TO THE FIRE BRIGADE



# AI-BASED SMOKE & FIRE DETECTION



## BENEFITS

REDUCE DAMAGES TO A MINIMUM VIA  
EARLY SMOKE & FIRE DETECTION

SECURE A SAFE WORK ENVIRONMENT

PROVIDE VISUAL EVIDENCE FOR  
INSURANCE CLAIMS

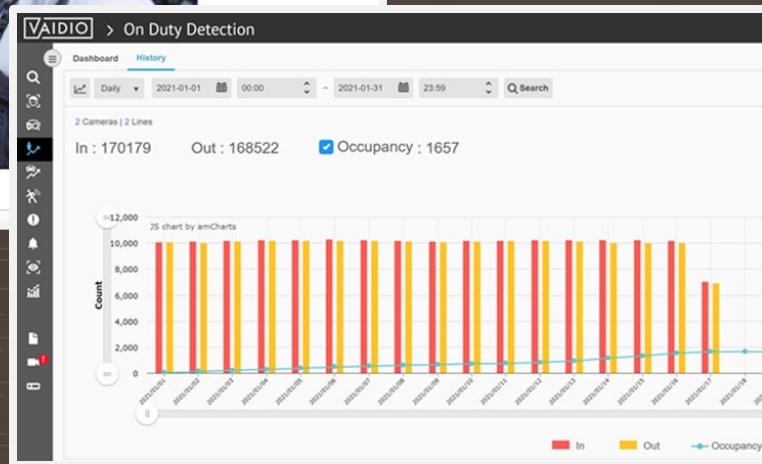
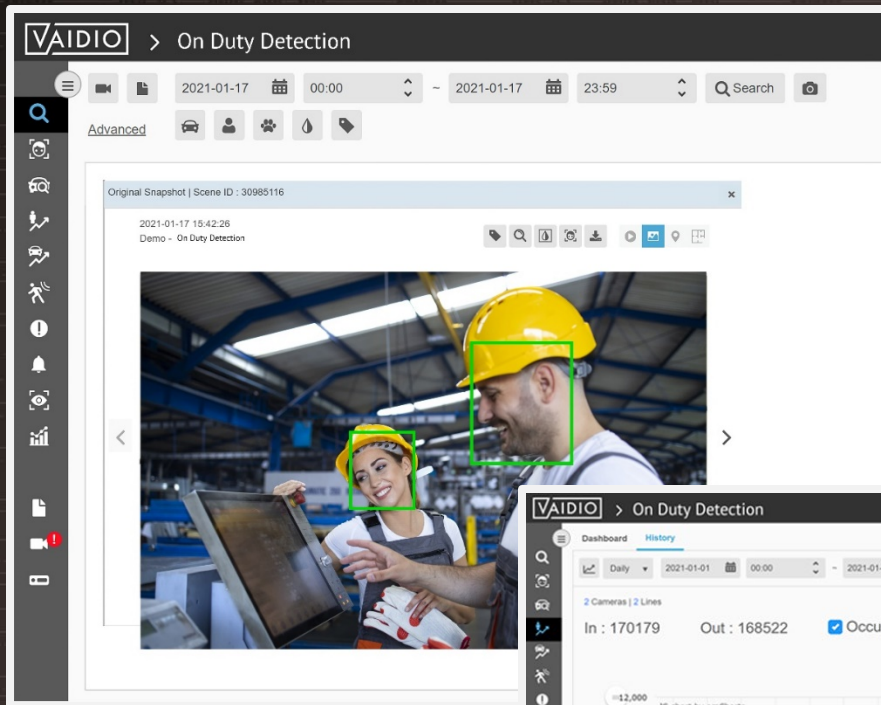
EASY INTEGRATION WITH THE FIRE  
DETECTION SYSTEM TO ALERT STAFF  
AND FIRE BRIGADE IN REAL-TIME

MANAGED FROM A PUBLIC, PRIVATE OR  
HYBRID CLOUD

EASIER TO MAINTAIN – REMOTE  
SYSTEM HEALTH MONITORING



# AI-BASED ON DUTY DETECTION



MAKE SURE THAT OPERATORS ARE AVAILABLE AT MISSION CRITICAL PRODUCTION UNITS TO PREVENT PRODUCTION STOPS

INTEGRATION OF VAIDIO AI-BASED FACE RECOGNITION IN HRM SYSTEM

ANALYZE PEOPLE MOVEMENT

GENERATE ON DUTY REPORTS BASED ON INCIDENTS AND PRODUCTION STOPS

# AI-BASED ON DUTY DETECTION



## BENEFITS

PREVENT PRODUCTION STOPS AS  
RESTARTS ARE EXPENSIVE

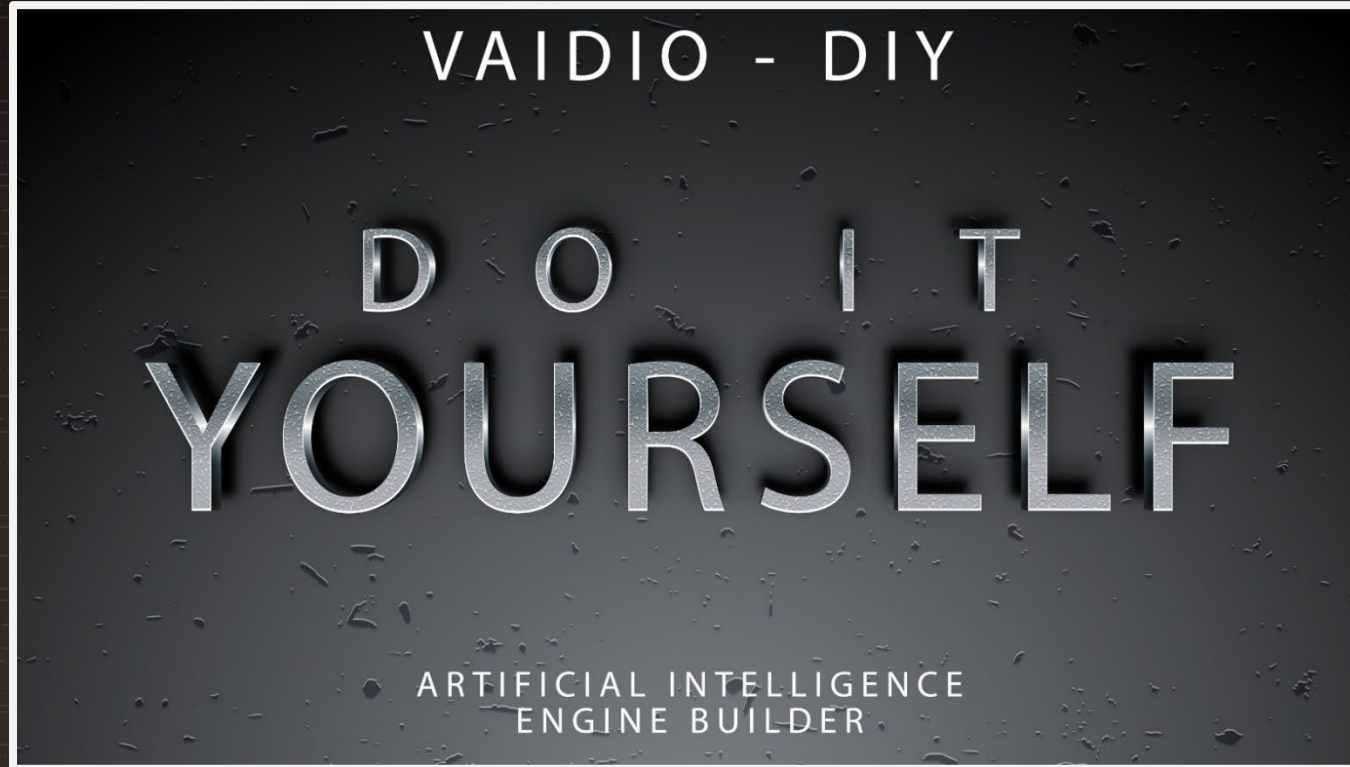
EASY INTEGRATION WITH EXISTING  
HRM SYSTEMS

TRACK TARGET PERSONS ON A MAP IN  
REAL-TIME AND ALERT THEM TO GO  
BACK TO THEIR PRODUCTION UNIT

MANAGED FROM A PUBLIC, PRIVATE OR  
HYBRID CLOUD

EASIER TO MAINTAIN – REMOTE  
SYSTEM HEALTH MONITORING

# VAIDIO TOOL KIT



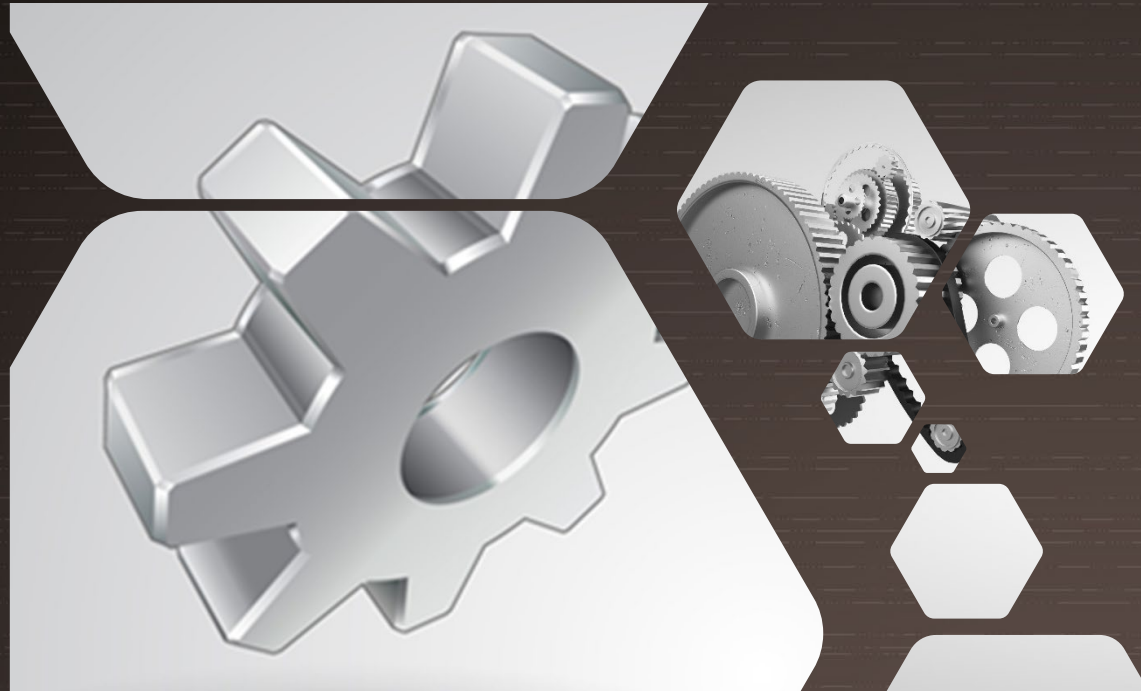
TRAIN YOUR OWN OBJECT  
DETECTION MODEL

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



## NUCLEAR POWER PLANT

### CHALLENGE

DETECT DRONE SIGHTINGS OVER  
CRITICAL INFRASTRUCTURE FACILITIES

### SOLUTION

TRAIN YOUR OWN DRONE DETECTION  
MODEL WITH VAIDIO-DIY

### BENEFITS

- ❖ PROTECT CRITICAL INFRASTRUCTURE FACILITIES
- ❖ PREVENT TERRORIST ATTACKS

## USE CASE 2



## ELECTRIC POWER LINES

### CHALLENGE

DETECT IRREGULARITIES IN ELECTRIC POWER LINES NETWORK WITH AI-ENABLED DRONES

### SOLUTION

TRAIN YOUR OWN ABNORMALITIES MODEL FOR ELECTRIC POWER LINES WITH VAIDIO-DIY

### BENEFITS

- ❖ PROTECT NETWORK OF ELECTRIC POWER LINES
- ❖ PREVENT SEVERE ACCIDENTS
- ❖ GUARANTEE ELECTRIC SUPPLY FOR CITIZENS

# USE CASE 3



## CHALLENGE

DETECT CORROSION IN TRANSMISSION TOWERS NETWORK

## SOLUTION

TRAIN YOUR OWN CORROSION DETECTION MODEL WITH VAIDIO-DIY

## BENEFITS

- ❖ PROTECT CRITICAL INFRASTRUCTURE COMMUNICATION NETWORK
- ❖ GUARANTEE COMMUNICATION FACILITIES FOR CITIZENS

# TRANSMISSION TOWERS

# INTEGRATION CAPABILITIES



CAMERA INTEGRATION

CLOUD PLATFORM INTEGRATION

ERP INTEGRATION



IO DEVICE INTEGRATION

SOFTWARE SERVICES

VMS INTEGRATION

# UTILITIES



# VAIDIO BENEFITS & SAVINGS

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

VAIDIO AI-ENABLED VIDEO ANALYTICS PROVIDES ACTIONABLE DATA TO ANALYZE & OPTIMIZE DECISION MAKING AROUND THE UTILITIES 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 PLANT SITES FROM A CENTRAL LOCATION. PROVIDE REAL-TIME ALERTS TO ON-SITE SECURITY STAFF VIA MOBILE DEVICES

WORKING TOGETHER  
ON THE ROAD TO A  
SAFER TOMORROW

