

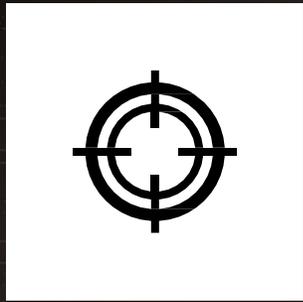
WORLD'S LEADING AI ENGINE BUILDERS

VAIDIO

AICUDA TECHNOLOGY & IRONYUN

# ANALYTICS FOR HOSPITALS & HEALTHCARE FACILITIES

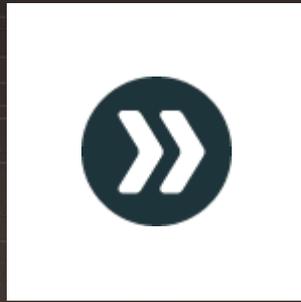




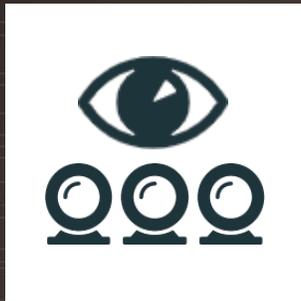
**ACCURATE**  
ALERTS



**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

A modern glass skyscraper with a blue 'H' logo on top, viewed through overlapping circular frames. The building is a multi-story structure with a grid of windows and a prominent blue 'H' logo on the upper right side. The image is framed by three overlapping circular shapes that create a layered effect. The background is a dark, textured surface.

# HOSPITALS & HEALTHCARE FACILITIES

# HOSPITAL & HEALTHCARE LAYOUT

## Ambulances / Unloading Area

- Access Control with License Plate Recognition
- Illegal Parking
- Intrusion Detection
- Abandoned Object Detection Emergency Entrance / Exit

## Pharmacies

- Access Control with Face Recognition
- Smoke and Fire Detection
- Weapon Detection
- Loitering

## Security Center

- Camera Health Management
- Track Target Objects
- Real Time Alerts
- Video Search

## Doctor's Office

- Aggression Detection
- Person Fall and Crouch

## Patient Area

- QR and Barcode Recognition
- Smoke and Fire Detection
- Person Fall and Crouch

## Entrance Area

- Face Recognition with Blacklist
- Loitering
- People Counting
- Weapon Detection

## Parking Lots

- License Plate Recognition
- Vehicle Make and Model
- Vehicle Counting
- Illegal Parking
- Loitering

## Corridor Area

- Abandoned Object Detection
- QR and Barcode Recognition
- Smoke and Fire Detection
- Person Fall and Crouch

## Lobby / Waiting Room

- Age, Gender and Emotion Detection
- Abandoned Object Detection
- Social Health Analytics
- Person Fall and Crouch
- Queue Detection



# CHALLENGES HOSPITALS & HEALTHCARE FACILITIES



HOSPITALS & HEALTHCARE FACILITIES FACILITATE A HIGH VOLUME OF PATIENTS, VISITORS AND EMPLOYEES

HOSPITALS & HEALTHCARE FACILITIES ARE OPEN AND INVITING ENVIRONMENTS

HOSPITALS & HEALTHCARE FACILITIES NEVER CLOSE AND SERVING THEIR COMMUNITIES 24/7

INCREASING WORKPLACE VIOLENCE FROM DRUGS-RELATED CRIMES, GANG INCIDENTS AND PATIENT OUTBURSTS

ONGOING RISK OF INFANT ABDUCTION CASES

FALSE CLAIMS AGAINST NURSES, PHYSICIANS AND OTHER MEDICAL STAFF

# INDOOR AREAS



## INDOOR AREAS

- ENTRANCE
- LOBBY / WAITING ROOM
- CORRIDOR
- PATIENT AREA
- DOCTOR'S OFFICE
- PHARMACIES
- SECURITY CENTER

# ENTRANCE



USE FACE RECOGNITION IN COMBINATION WITH A WATCHLIST TO NOTIFY SECURITY STAFF WHEN KNOWN AGGRESSIVE PATIENTS ENTER THE HOSPITAL

MONITOR PERSONS THAT REMAIN IN AND AROUND THE PHARMACY FOR A PROTRACTED TIME WITHOUT AN APPARENT PURPOSE (LOITERING)

DRAW A LINE AND COUNT THE INCOMING AND OUTGOING PATIENTS AT THE ENTRANCE TO ANALYZE AND OPTIMIZE THE HOSPITAL INFRASTRUCTURE

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

# LOBBY / WAITING ROOM



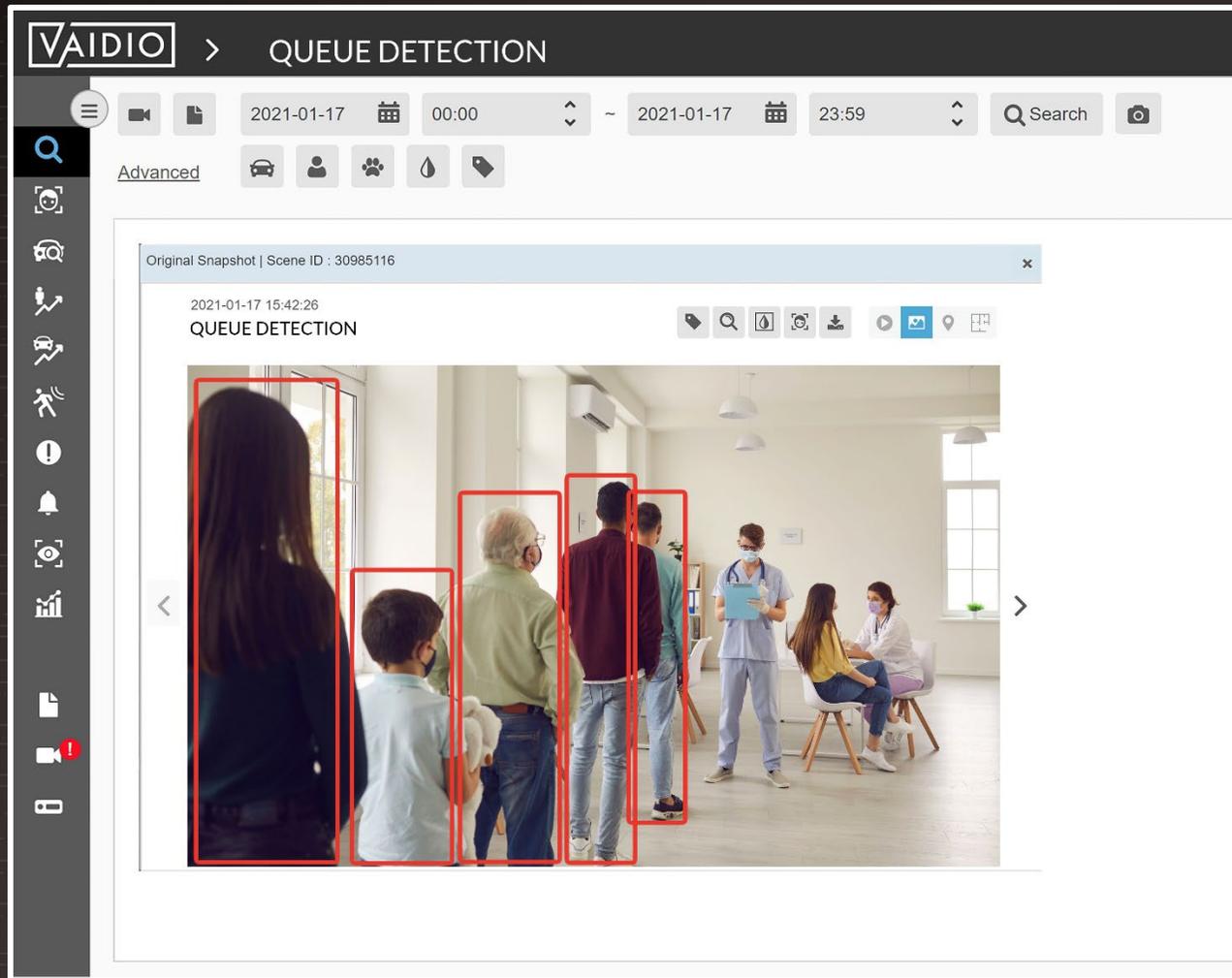
RECOGNIZE EMOTIONS SUCH AS ANGER, SADNESS, FEAR AND JOY

USE EMOTION TRACKING TO GIVE THE HOSPITAL THE ABILITY OF WHAT IS PLEASING, INTERESTING OR ANNOYING HOSPITAL PATIENTS BASED ON THEIR EMOTIONAL REACTION

DETECT AGE AND GENDER FOR PATIENT SEGMENTATION IN AGE AND GENDER GROUPS

TRIGGER ALERTS IF ABANDONED OBJECTS REACH A CERTAIN (ABNORMAL) TIME THRESHOLD IN THE LOBBY / WAITING ROOM AREA

# LOBBY / WAITING ROOM



USE SOCIAL HEALTH ANALYTICS IN COMBINATION WITH TEMPERATURE SCREENING WHEN PATIENTS ENTER THE LOBBY / WAITING ROOM

TRIGGER ALERTS WHEN PATIENTS FALL OR CROUCH IN THE LOBBY / WAITING ROOM

MONITOR AND DETECT QUEUES AND TRIGGER ALERTS TO PREVENT WAITING TIMES AND IMPROVE PATIENT SATISFACTION TO OPTIMIZE THE PATIENT EXPERIENCE IN THE HOSPITAL

ALIGN MEDICAL STAFF RESOURCES WITH THE PATIENT FLOW

# CORRIDOR



DETECT ABANDONED OBJECTS IN REAL-TIME AND TRIGGER ALERTS

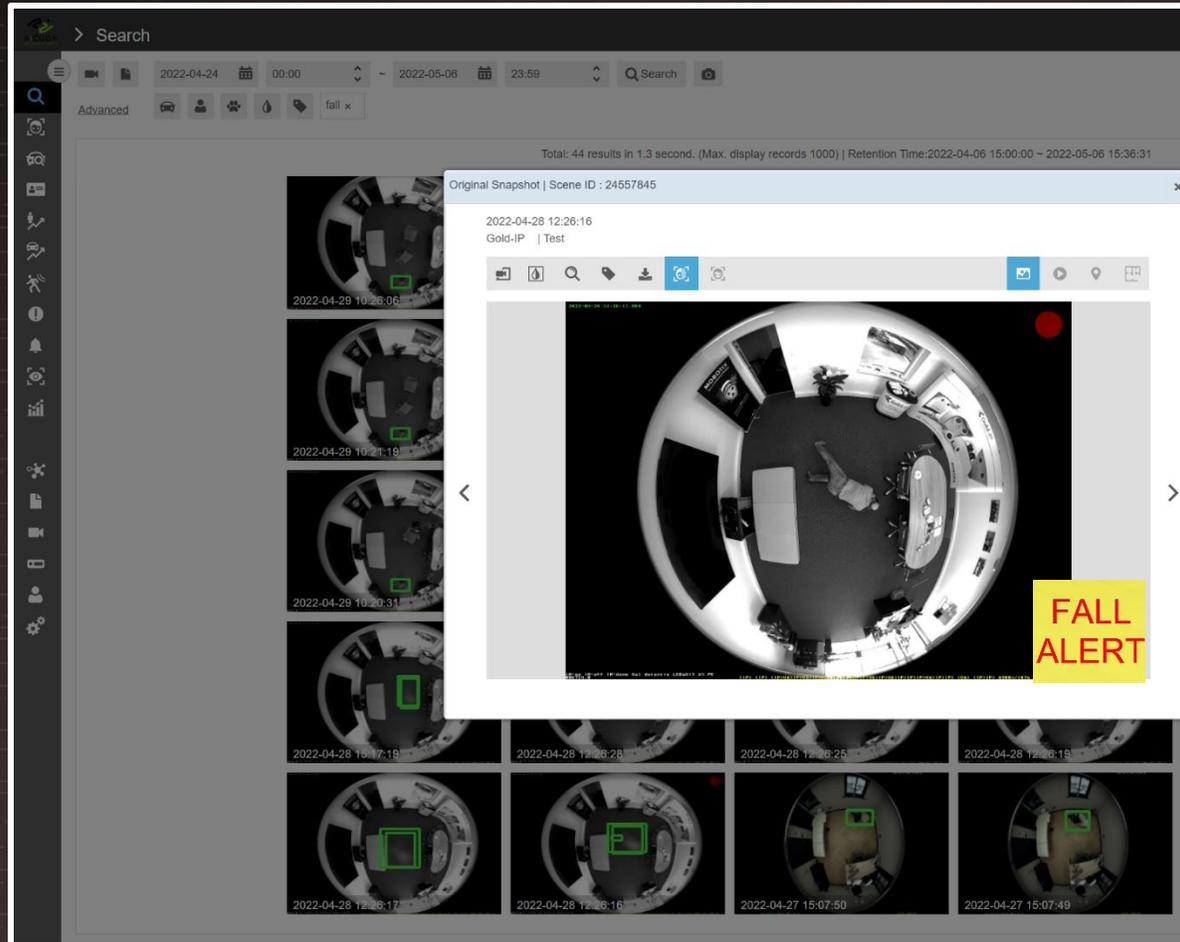
IDENTIFY PERSONS WHO LEFT OBJECTS INSIDE THE CORRIDOR AND TRY TO LOCATE THIS PERSONS

TRACK AND LOCATE MEDICAL EQUIPMENT WITH QR CODE AND/OR BARCODE RECOGNITION

TRIGGER AN ALERT WHEN SMOKE OR FIRE APPEARS IN THE CAMERA FIELD OF VIEW

TRIGGER ALERTS WHEN PATIENTS FALL OR CROUCH IN THE CORRIDOR AND WARN MEDICAL STAFF ON THEIR MOBILE DEVICES

# PATIENT AREA



NOTIFY MEDICAL STAFF WHEN A PATIENT FALLS OR CROUCHES IN THE FIELD OF VIEW OF THE CAMERA

FALL DETECTION SOLUTION ON A FISHEYE CAMERA TO COVER AN ENTIRE PATIENT ROOM

AI ANALYTICS DETECTION TO REDUCE FALSE ALARMS TO A MINIMUM

ALERT NOTIFICATION AFTER 20 SECONDS

OPERATES 24/7 IN ALL PATIENT ROOMS

ACTIONABLE DATA INSIGHTS INTO DAY / NIGHT RHYTHM OF PATIENTS

# PATIENT AREA



TAG WHEELCHAIRS, BEDS, MONITORS, MOBILE WORKSTATIONS AND OTHER HOSPITAL ASSETS WITH QR CODES AND/OR BARCODES TO TRACK AND LOCATE THIS MEDICAL EQUIPMENT

TRIGGER AN ALERT WHEN SMOKE OR FIRE APPEARS IN THE CAMERA FIELD OF VIEW

# DOCTOR'S OFFICE

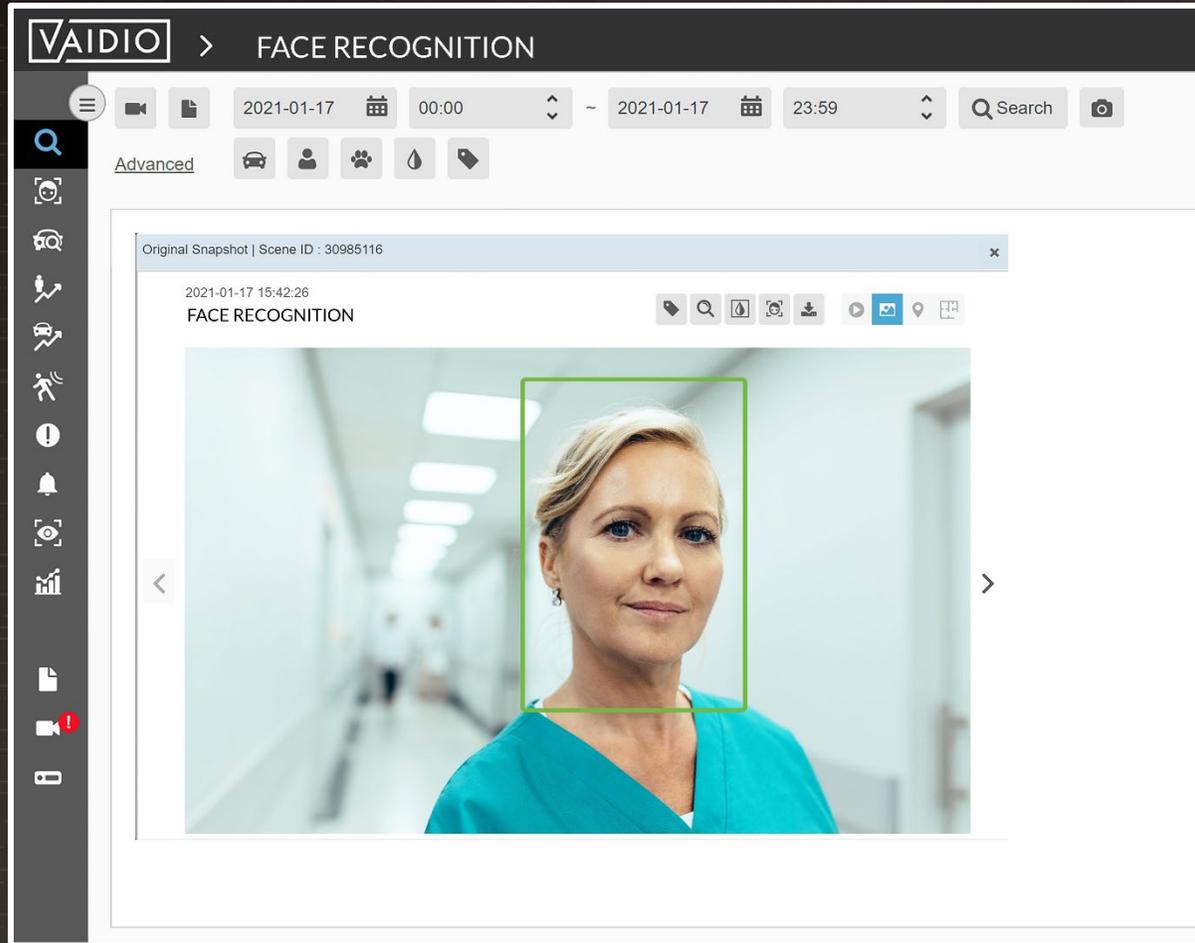


DETECT OUTBURSTS AND AGGRESSIVE BEHAVIOR FROM HOSPITAL PATIENTS AND TRIGGER REAL-TIME ALERTS TO PROTECT DOCTORS AND OTHER MEDICAL STAFF

TRIGGER ALERTS WHEN PATIENTS FALL OR CROUCH IN THE DOCTOR'S OFFICE TO NOTIFY OTHER MEDICAL STAFF TO SUPPORT THE DOCTOR

USE VAIDIO FACE SEARCH TO LOCATE DOCTORS QUICKLY IN CASE OF AN EMERGENCY

# PHARMACIES

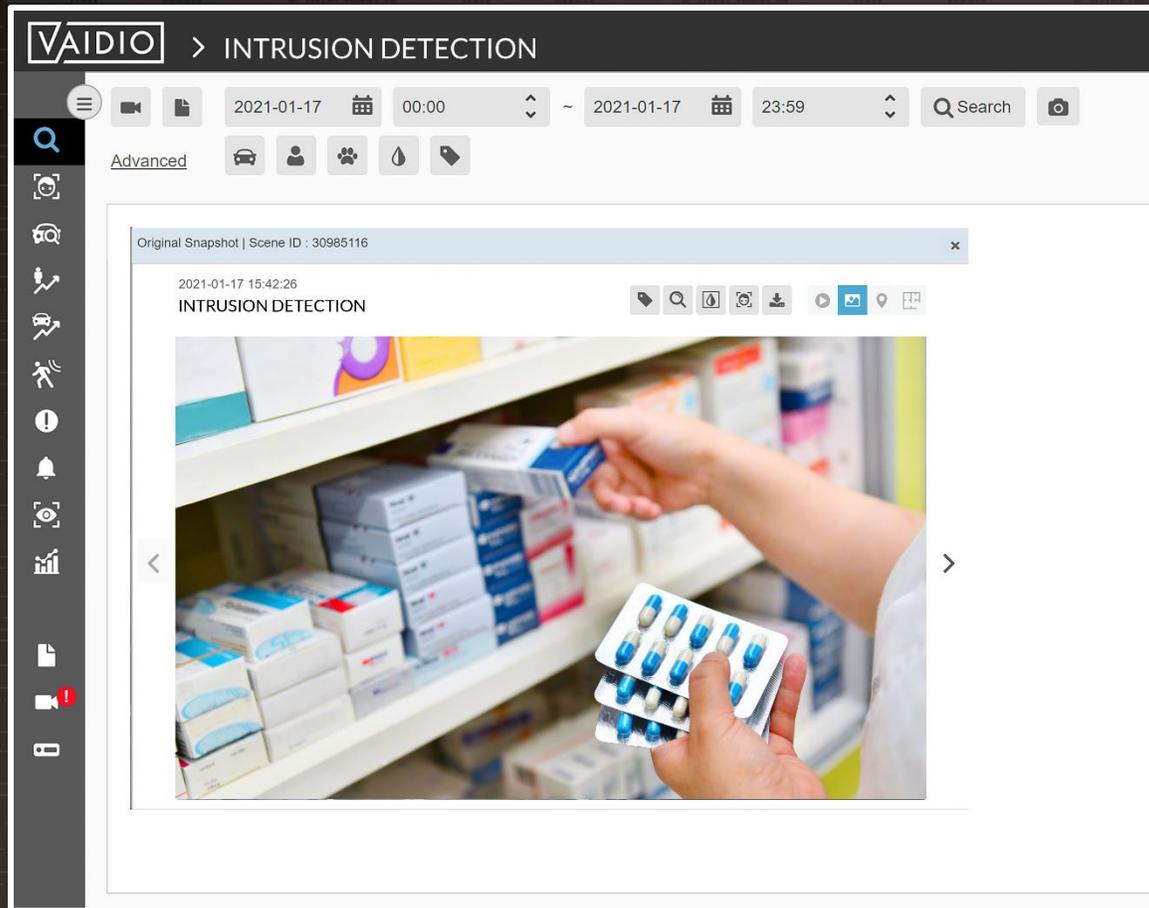


INTEGRATION OF VAIDIO AI-BASED FACE RECOGNITION IN ACCESS CONTROL AND HRM SYSTEMS TO UNLOCK THE HOSPITAL PHARMACY IN REAL-TIME FOR AUTHORIZED MEDICAL STAFF ONLY TO PREVENT FRAUD AND THEFT

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

TRACK TARGET PERSONS ON A MAP AND PERFORM TRACING IN CASE OF ACCIDENTS OR INCIDENTS IN AND AROUND THE PHARMACY AREA

# PHARMACIES



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

MONITOR PERSONS THAT REMAIN IN AND AROUND THE PHARMACY FOR A PROTRACTED TIME WITHOUT AN APPARENT PURPOSE (LOITERING)

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

# SECURITY CENTER



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

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

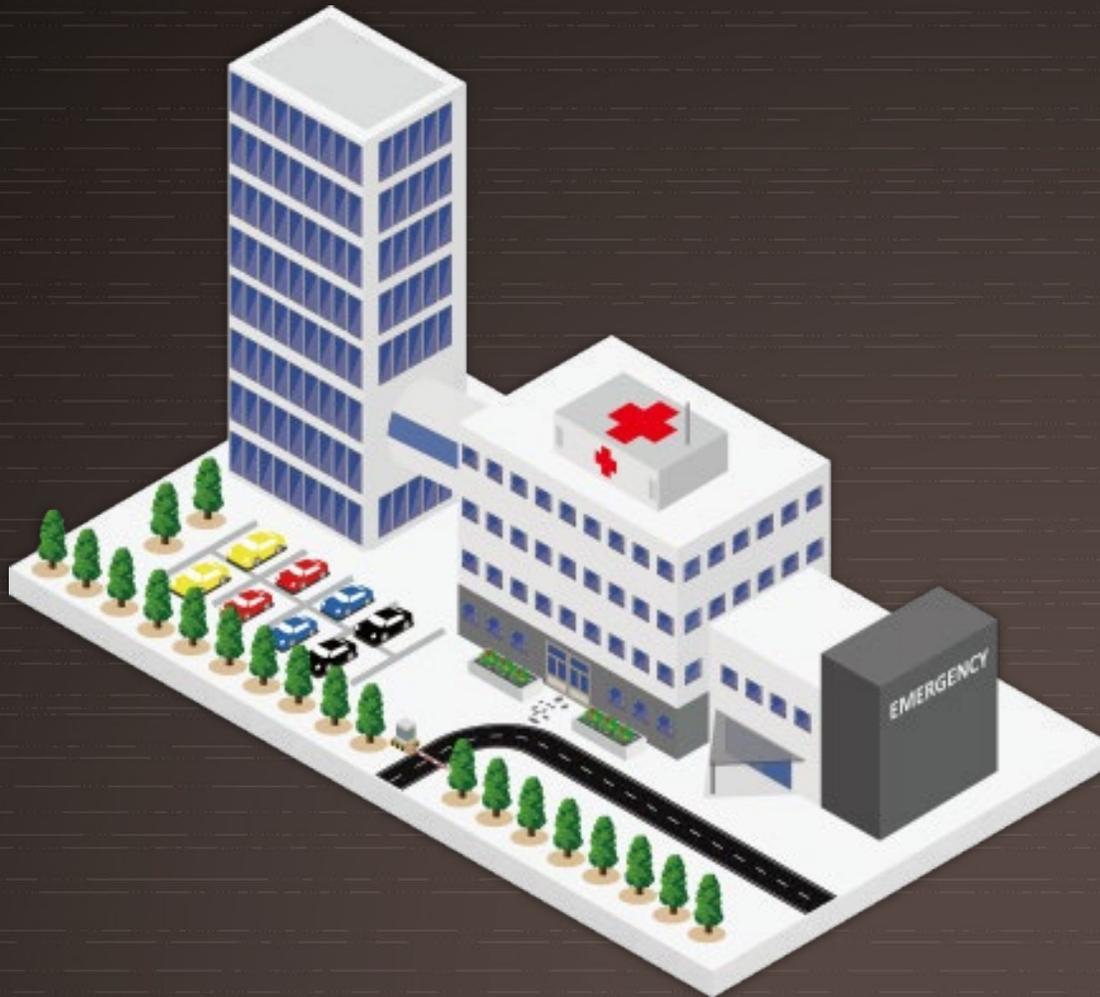
PROVIDE REAL-TIME ALERTS TO HOSPITAL SECURITY STAFF ON MOBILE DEVICES IN CASE OF INCIDENTS

SEARCH THROUGH TERABYTES OF VIDEO IN SECONDS WHEN INVESTIGATING INCIDENTS AND PROVIDE VISUAL EVIDENCE FOR INSURANCE CLAIMS

UPLOAD A PICTURE OF A PATIENT, DOCTOR OR HOSPITAL STAFF MEMBER AND OBTAIN A FULL LIST OF CAMERA FEEDS INCLUDING CAMERA POSITION AND TIME STAMP



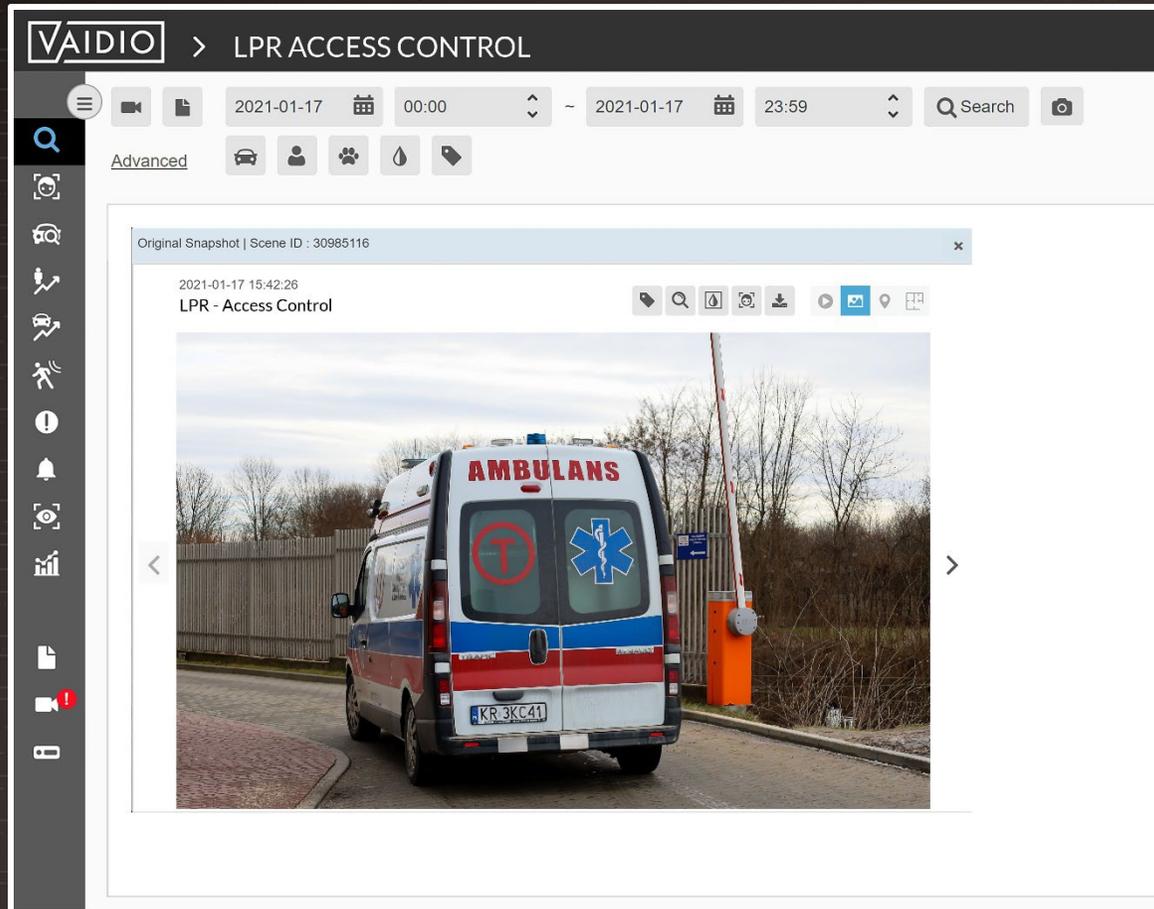
# OUTDOOR AREAS



## OUTDOOR AREAS

- AMBULANCES / UNLOADING AREA
- PARKING LOTS

# AMBULANCES / UNLOADING AREA



REGISTER AMBULANCE LICENSE PLATES FOR AUTOMATIC ENTRANCE CONTROL

APPLY LICENSE PLATE RECOGNITION WITH WHITELIST TO PREVENT ACCESS TO AND ILLEGAL PARKING IN AMBULANCE AND UNLOADING ZONES

DETECT ABANDONED OBJECTS THAT ARE BLOCKING EMERGENCY ENTRANCES AND EXITS FOR AMBULANCES

DRAW A ROI IN AMBULANCE AND UNLOADING ZONES AND TRIGGER ALERTS WHEN PEOPLE ENTER IN THE FIELD OF VIEW OF THE CAMERA

# AMBULANCES / UNLOADING AREA



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

MONITOR PEOPLE THAT REMAIN AT THE AMBULANCE AND UNLOADING ZONES FOR A PROTRACTED TIME WITHOUT AN APPARENT PURPOSE (LOITERING)

AMBULANCES / UNLOADING  
AREA

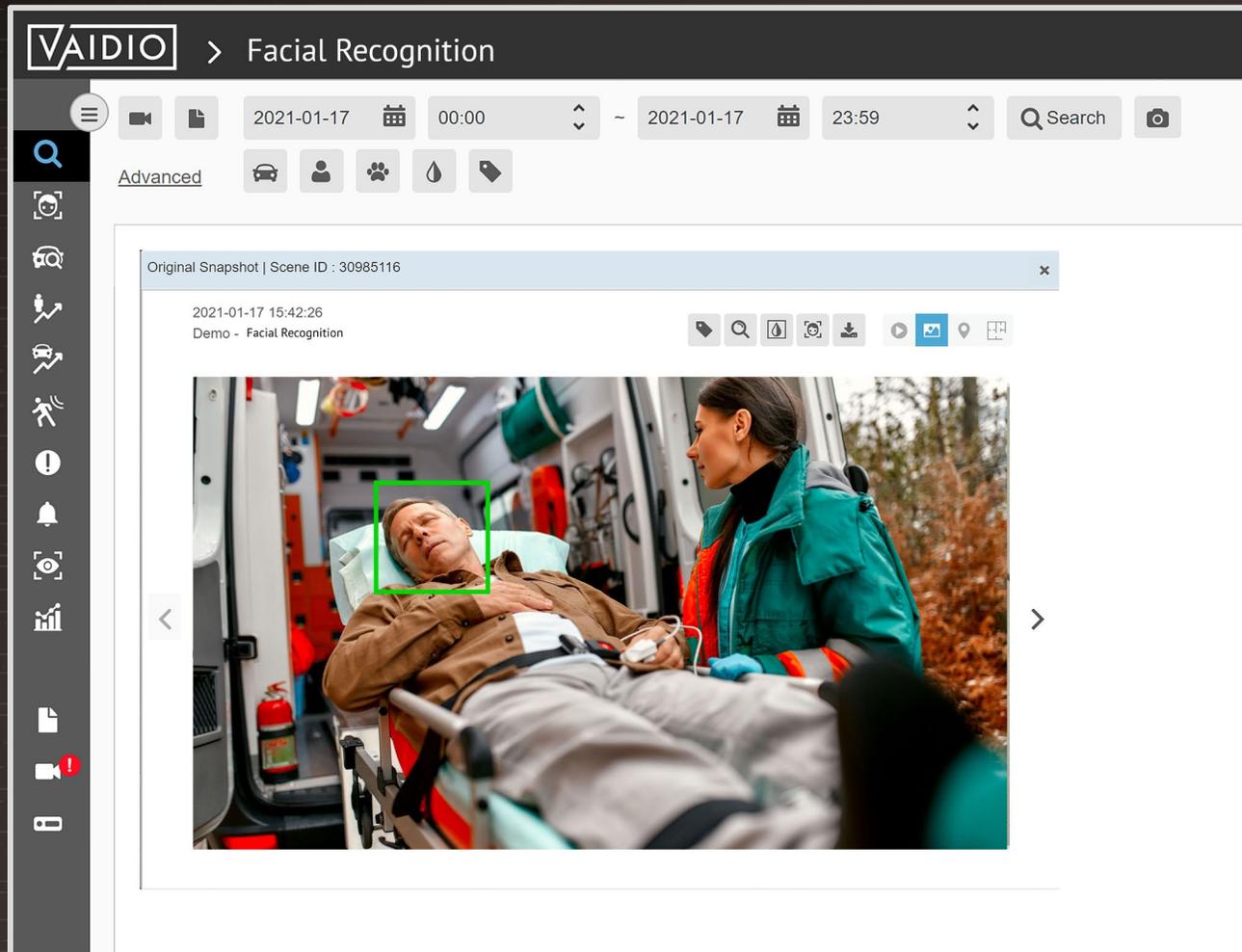
MOBILE DEVICES



MOBILE CAM APP

MEDICAL TEAM

# AMBULANCES / UNLOADING AREA

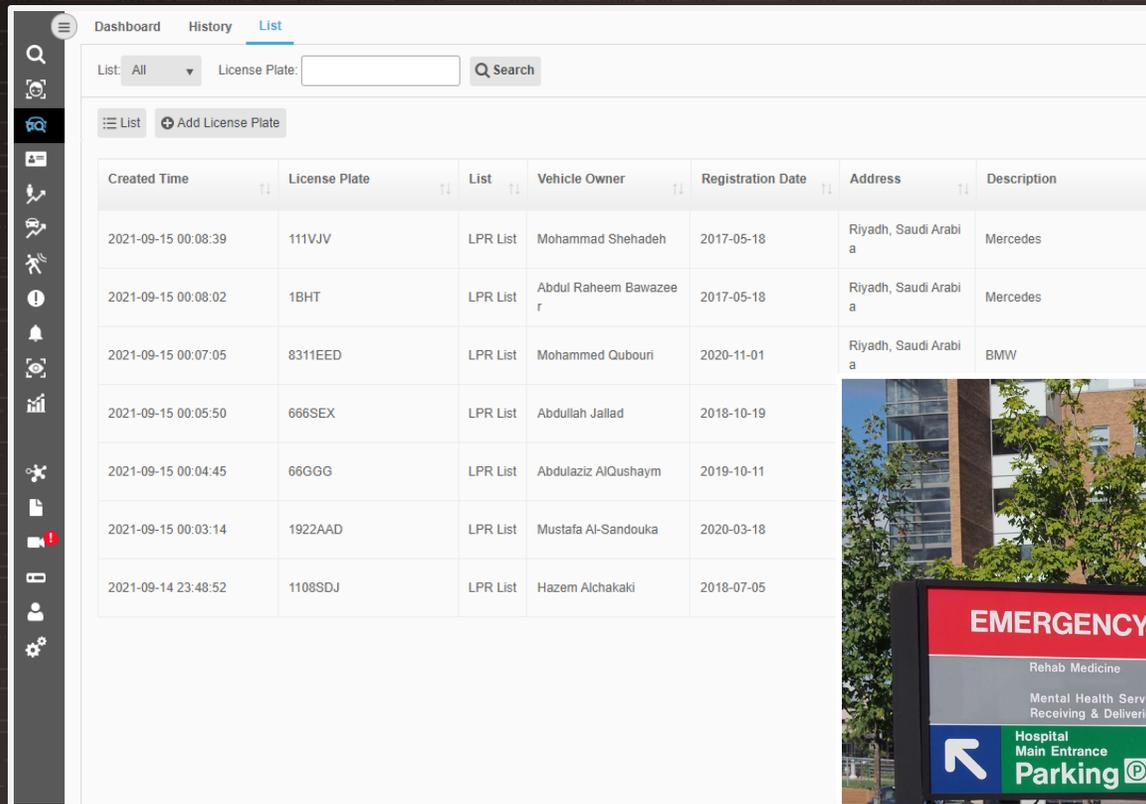


## FACIAL RECOGNITION

SCAN THE FACE OF THE PATIENT IN THE AMBULANCE WITH VAIDIO MOBILE CAM APP ON A MOBILE DEVICE

ENABLE THE HOSPITAL OR HEALTHCARE FACILITY TO STUDY THE MEDICAL FILE AND PREPARE THE OPERATING ROOM BEFORE THE PATIENT ARRIVES

# PARKING LOTS



Created Time	License Plate	List	Vehicle Owner	Registration Date	Address	Description
2021-09-15 00:08:39	111VJV	LPR List	Mohammad Shehadeh	2017-05-18	Riyadh, Saudi Arabia	Mercedes
2021-09-15 00:08:02	1BHT	LPR List	Abdul Raheem Bawazeer	2017-05-18	Riyadh, Saudi Arabia	Mercedes
2021-09-15 00:07:05	8311EED	LPR List	Mohammed Qubouri	2020-11-01	Riyadh, Saudi Arabia	BMW
2021-09-15 00:05:50	666SEX	LPR List	Abdullah Jallad	2018-10-19		
2021-09-15 00:04:45	66GGG	LPR List	Abdulaziz AlQushaym	2019-10-11		
2021-09-15 00:03:14	1922AAD	LPR List	Mustafa Al-Sandouka	2020-03-18		
2021-09-14 23:48:52	1108SDJ	LPR List	Hazem Alchakaki	2018-07-05		



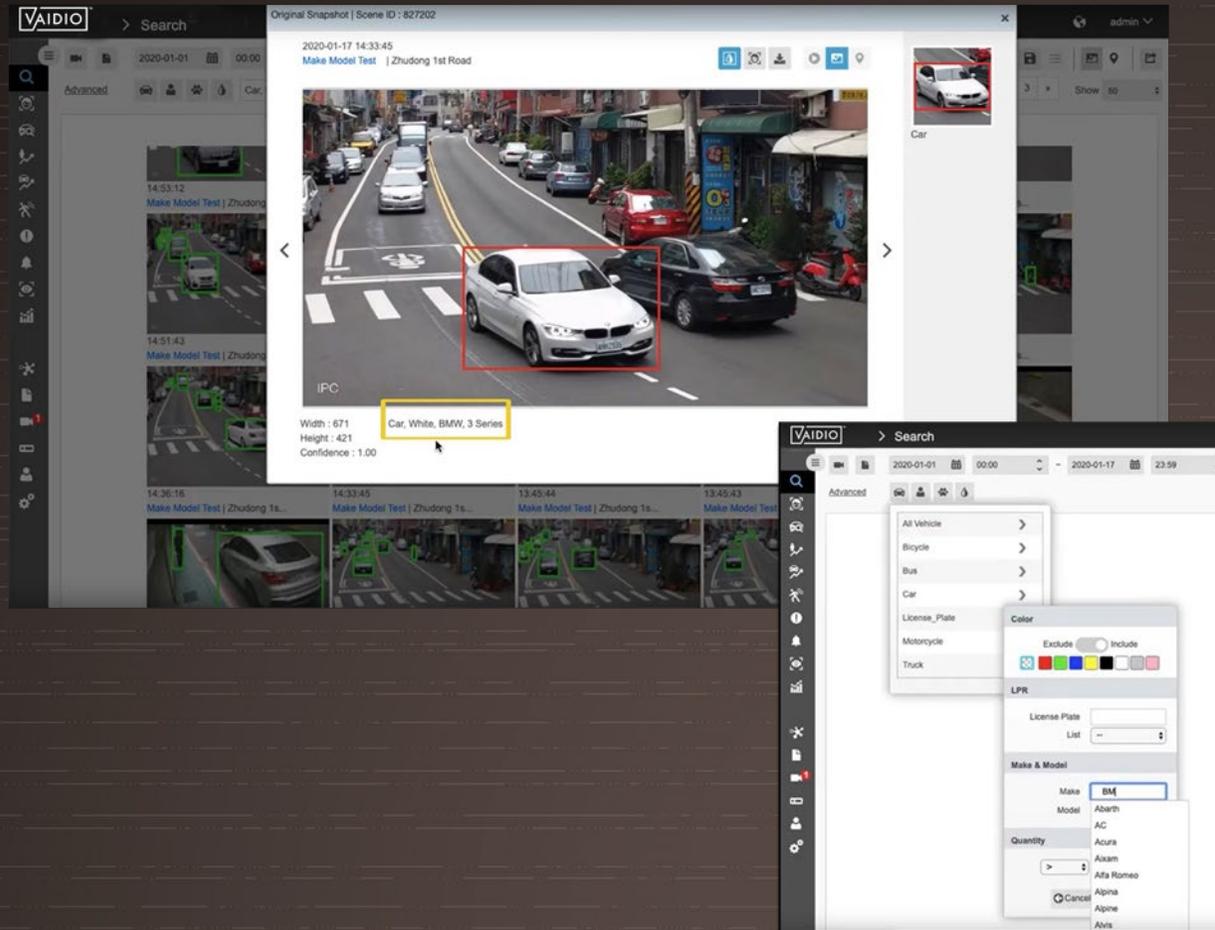
REGISTER VEHICLE LICENSE PLATES WITH VEHICLE OWNERS TO CREATE BLACK- AND WHITELISTS

APPLY LICENSE PLATE RECOGNITION WITH WHITELIST FOR HOSPITAL STAFF FOR RESTRICTED PARKING AREAS

APPLY LICENSE PLATE RECOGNITION WITH BLACKLIST FOR LEAVE WITHOUT PAYING OR FOR AGGRESSIVE PATIENTS

TRIGGER ALERTS FOR CARS THAT ARE ILLEGALLY PARKED AND NOTIFY THE SECURITY CENTER IN REAL-TIME

# PARKING LOTS



SEARCH FOR A SPECIFIC VEHICLE MAKE AND MODEL THROUGH MULTIPLE CAMERAS AND UPLOADED VIDEO FOOTAGE

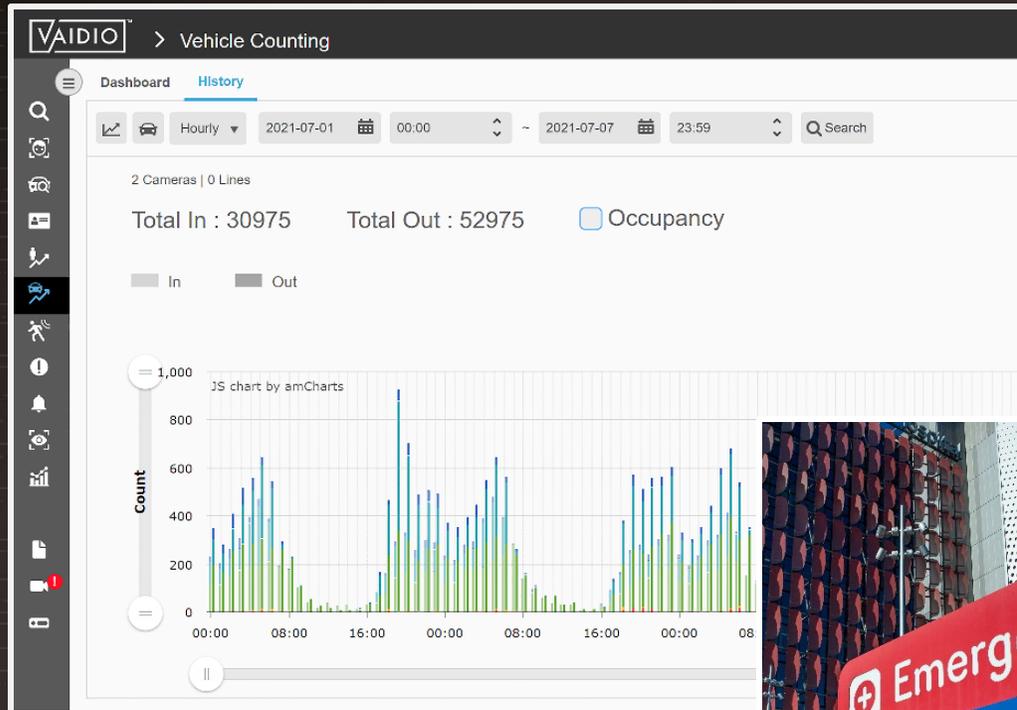
NARROW DOWN SEARCH RESULTS WHEN SEARCHING FOR A TARGET VEHICLE

TRACK VEHICLES IN REAL-TIME BASED ON COLOR, QUANTITY AND PARTIAL LICENSE PLATE NUMBER

IDENTIFY OVER 200 MAKES AND 2000 MODELS



# PARKING LOTS



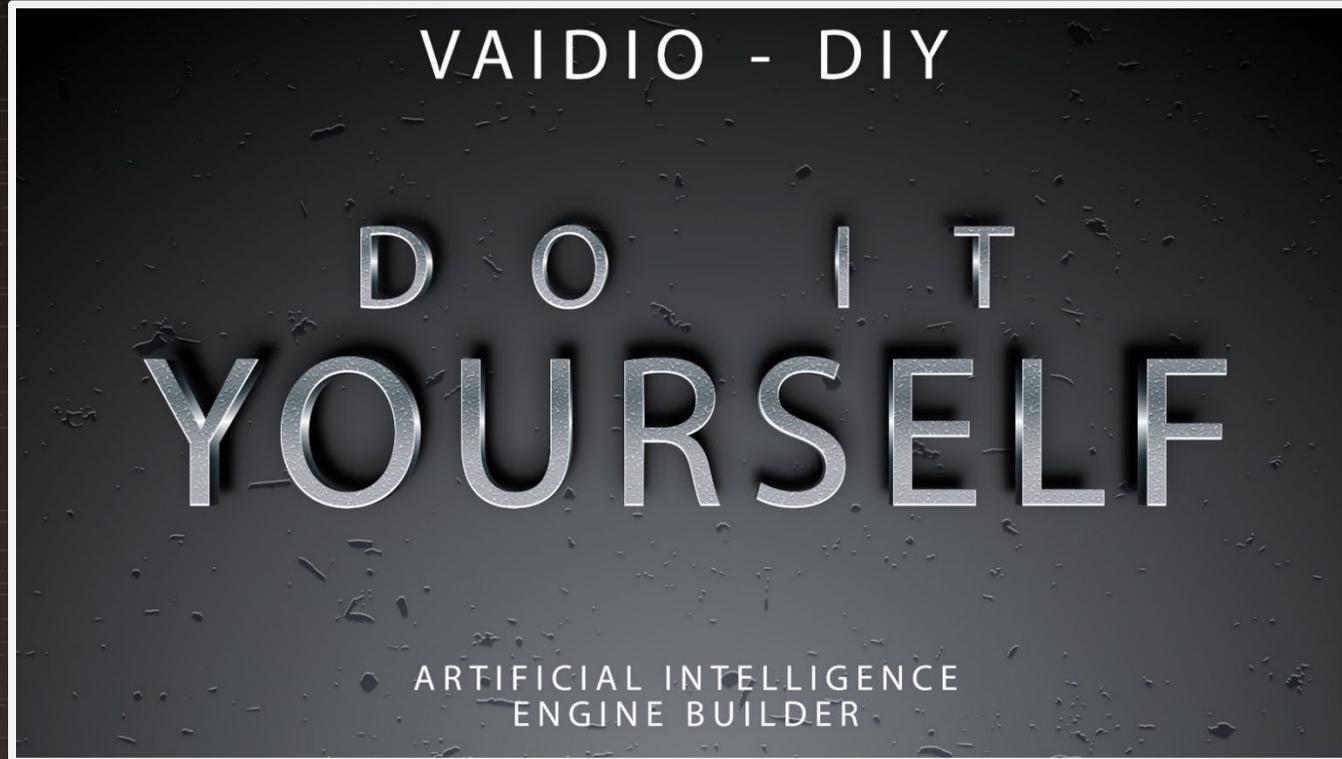
VAIDIO VEHICLE COUNTING PROVIDES ACTIONABLE DATA TO ANALYZE TRAFFIC FLOWS AND OPTIMIZE DECISION MAKING AROUND HOSPITAL INFRASTRUCTURE

DETERMINE HOSPITAL PEAK HOURS

CATEGORIZATION OF VEHICLES IN BICYCLE, BUS, CAR, MOTORCYCLE AND TRUCK

GENERATE REPORTS BASED ON TRAFFIC FLOWS AND CATEGORIZATION

# VAIDIO TOOL KIT



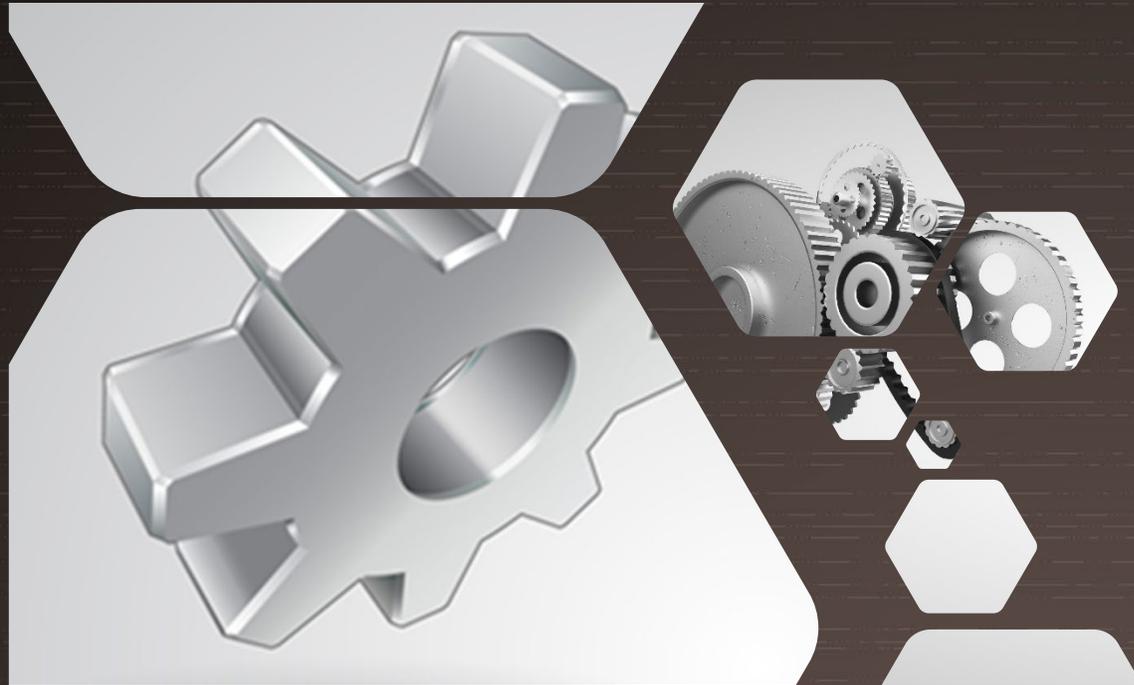
TRAIN YOUR OWN OBJECT  
DETECTION MODEL

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

## CHALLENGE

DETECT UNIFORMS IN HOSPITALS  
AND HEALTHCARE FACILITIES

## SOLUTION

TRAIN YOUR OWN UNIFORM  
DETECTION MODEL WITH  
VAIDIO-DIY

## BENEFITS

- ❖ MAKE SURE THAT MEDICAL STAFF  
IS WEARING THE PROPER UNIFORMS
- ❖ PATIENT IS ABLE TO RECOGNIZE  
MEDICAL STAFF



HOSPITALS & HEALTHCARE FACILITIES



# INTEGRATION CAPABILITIES



CAMERA INTEGRATION

CLOUD PLATFORM INTEGRATION

ERP INTEGRATION



IO DEVICE INTEGRATION

SOFTWARE SERVICES

VMS INTEGRATION

# HOSPITALS & HEALTHCARE FACILITIES



# VAIDIO BENEFITS & SAVINGS

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

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



# VAIDIO™ AI VISION PLATFORM