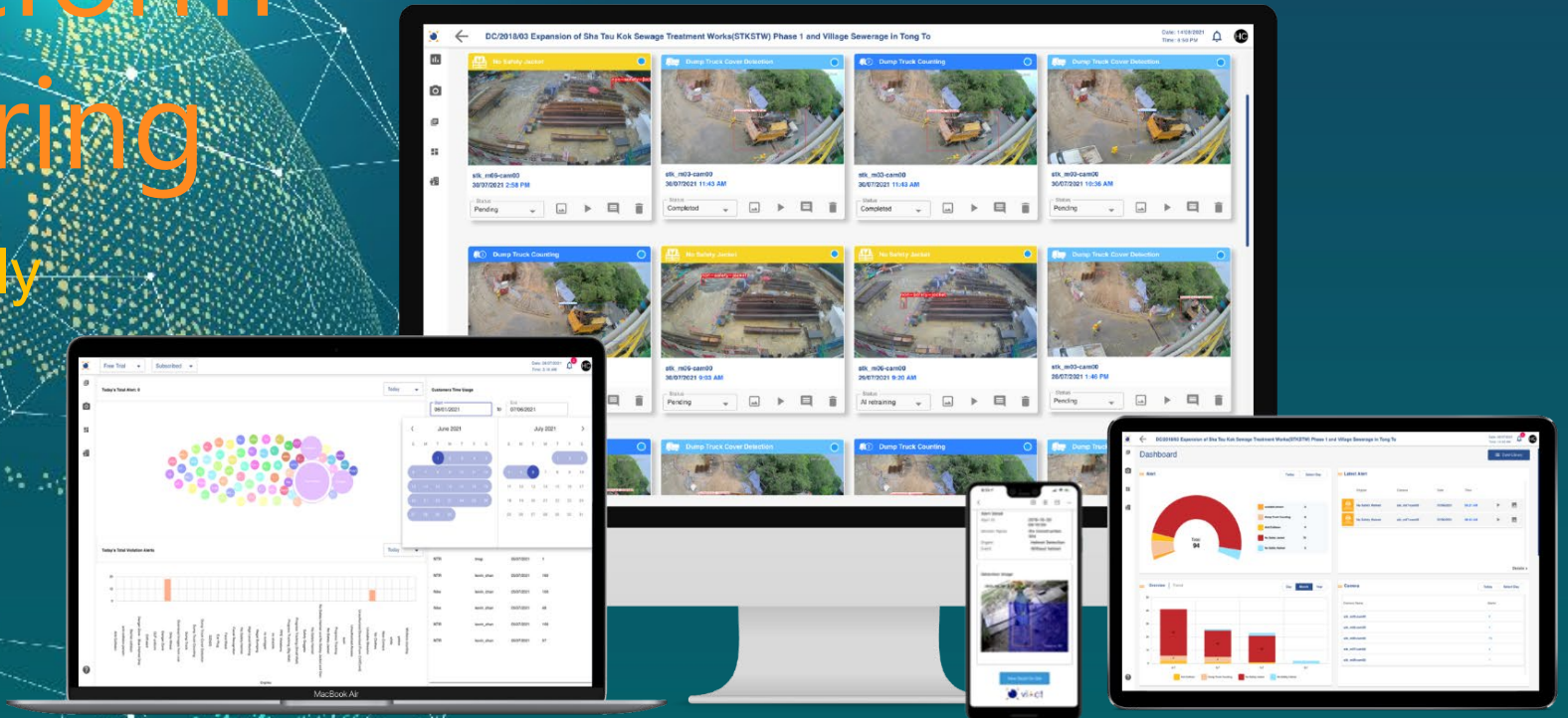




# 人工智能監控工地安全系統 和危險區域管理系統

# The Solution Edges of viAct 1st Cloud Platform for AI Monitoring

- ✓ Desktop & Mobile friendly
- ✓ Real time instant alerts
- ✓ Video clips review
- ✓ 3D model visualization
- ✓ Work progress report
- ✓ Log data analysis



# 50+

## Pre-built AI Modules promoting E-S-G

R&D since 2016, 6+ module based research papers in international journals of repute



### E

## ENVIRONMENTAL

- Carbon Footprint Emission
- Dump Truck Cover Detection
- Gas/Water Leakage Detection
- Waste Management
- Illegal Dumping Detection
- Site Entrance Hygiene Monitoring
- Fire/Smoke Detection
- Water Level Monitoring
- Dirty Water Detection
- Dirty Wheels Detection
- Dirty Roads Detection

### S

## SOCIAL

- No Shackle Detection
- No Safety Helmet Detection
- No Safety Jacket Detection
- Work at Height
- Tower Zone Danger Zone
- No Safety Goggles Detection
- No Safety Harness Detection
- No Outrigger Detection
- Anti Collision (People)
- No Face Mask Detection
- No Clothes Detection
- Non-Compliance Behaviour Detection
- Danger Behaviour Detection
- People/Objects Fall Down Detection
- Smoking Detection
- Anti Collision (Object)
- Anti-COVID
- Danger Zone Intrusion

### G

## GOVERNANCE

- Progress Tracking
- Progress Tracking (Wall)
- Water Barrier
- Traffic Cone & Fencing Detection
- Excavation Progress Tracking
- People Counting/Tracking
- Unauthorized Access (Vehicle)
- Scissor Lift Operation
- Machine Counting/Tracking
- Dump Truck Counting/Tracking
- Face Recognition
- Vehicle License
- Unauthorized Access (People)
- Material Classification

# Over 100 Deployments Across Asia



# AI Modules

## User Cases

Safety | Productivity | Environmental | Inspection

# USE CASES

Tower Crane Monitoring



Lifting Operation

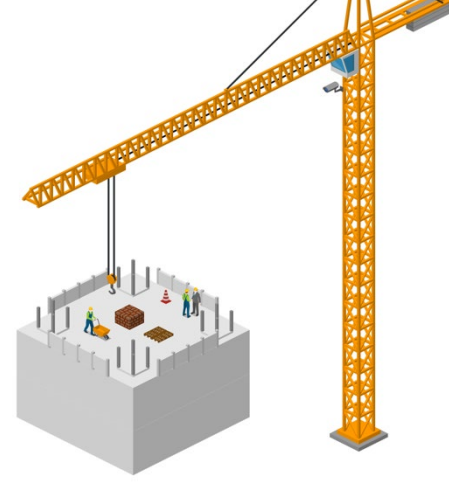


Machinery Anti-collision



Holistic Monitoring

Roof Top Monitoring



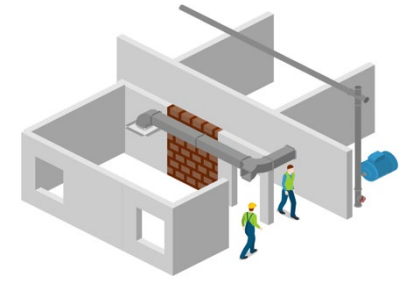
Building Inspection



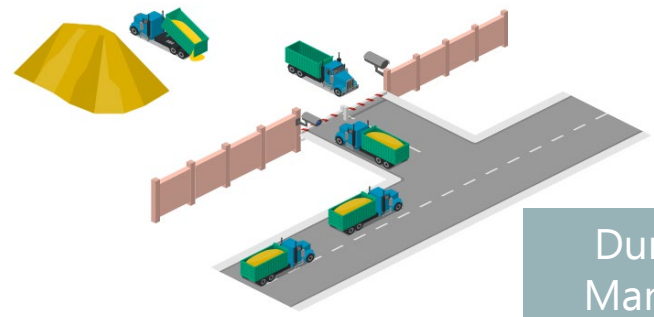
Maintenance works



Progress Checking



Dump Truck Management



# PPE Violation Monitoring

(1) Safety Helmet Detection



(2) Safety Harness Detection



(5) No Clothes Detection



(3) Reflective Vest Detection



(4) Face Mask Detection

## Clients



# Intrusion Monitoring

(1) Worker enter danger area under excavation



(2) Vehicle enter human path



(3) Water Barrier Pattern Detection



(4) Unauthorized Access – Only blue helmet allowed



## Clients





# High Level Working Monitoring

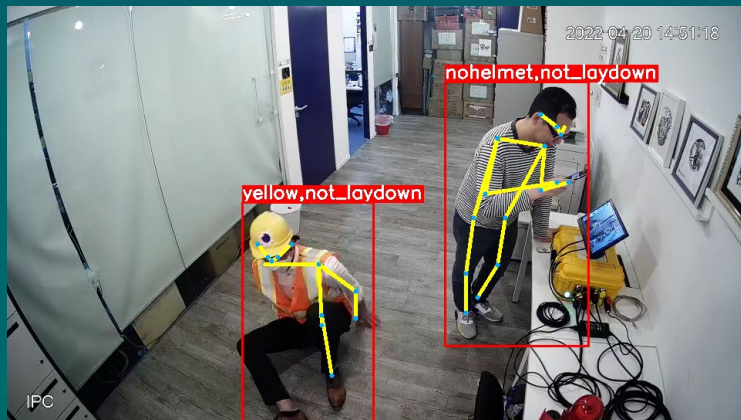
(1) Worker climb up ladder



(2) Working at scissor lifts



(3) People Fall Down Detection



(4) Object Fall Down Detection



Clients



# Mobile Crane AI Monitoring System – viMac (DZASS)

Power Up Machinery with AI



Smart Collision Detection



Smart Intrusion Detection



Lifting Danger Zone



Lifting Object Recognition



Machinery Operation Tracking



# (DZAAS) Danger Zone AI Alert System

- Alert all stakeholders :
  - Crane operator (monitor & sound alarm)
  - Workers near cranes (sound alarm)
  - On-site safety officers or site agent (mobile alerts)
  - Office managers and top management (reports & dashboard)



## Only 3 Components

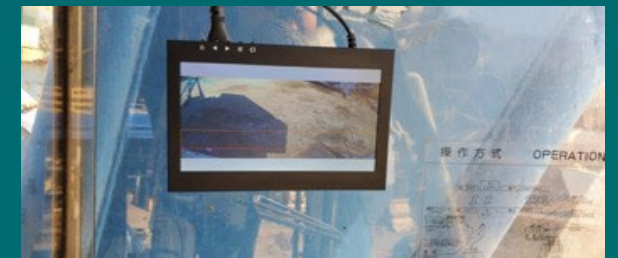
Component 1 – IP Cameras



Component 2 – AI Processor



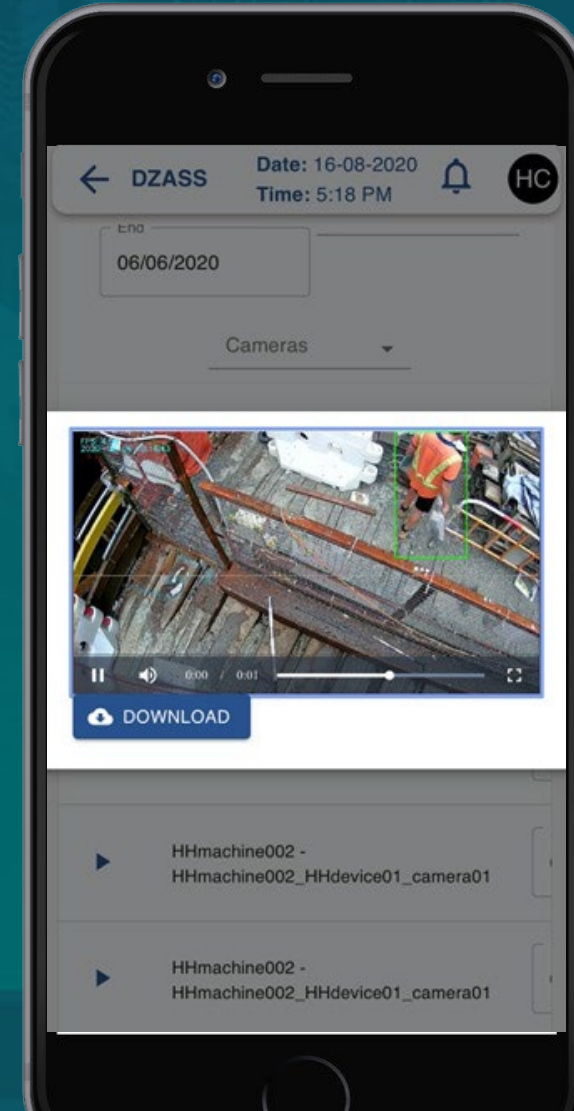
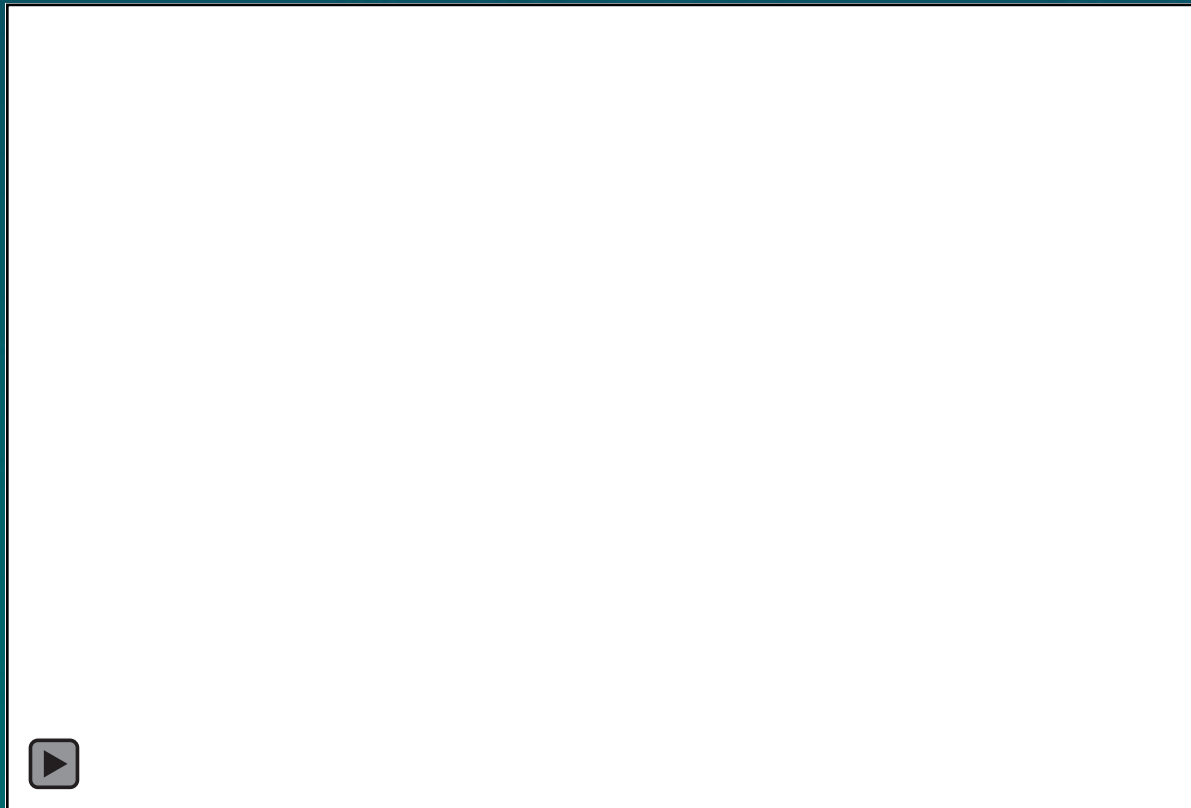
Component 3 – Monitor w/ speaker



Protect  
Your  
Workers  
Right Now !

# DZASS – Real Time Local & Remote Alerts

Instant sound alert triggered inside cabin to alert operator



Mobile alert to review clips who walk nearby the crane

# DZASS Anti-Collision

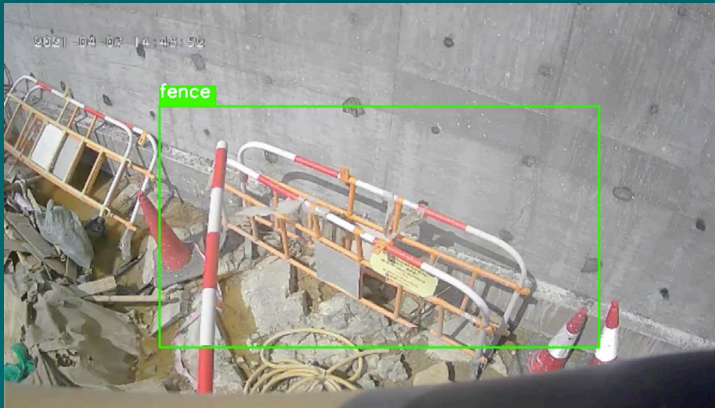
(1) Detect any people walk close before moving / turning



(2) Detect while crane turning



(3) Detect crane too close to fence or traffic cone



(4) Detect crane too close to water barrier



## Clients



# Dump Truck AI Monitoring System



Truck Cover Detection



Dirty Wheel Detection



Dirty Road Detection



Car Plate Recognition



Queuing Time



Cycle Time



# Dump Truck Management

(1) Dump Truck Counting



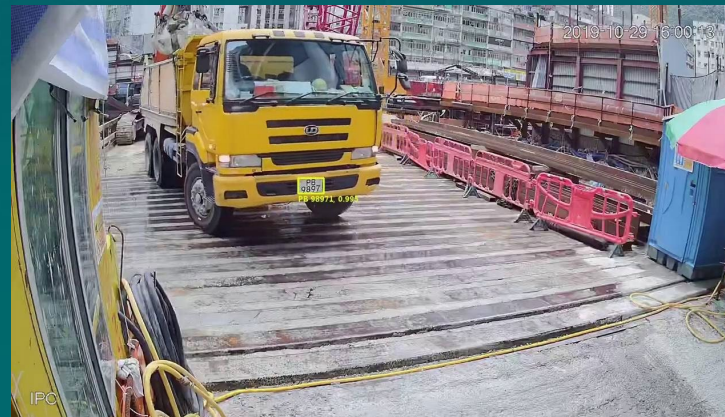
(2) Dump Truck Cover Detection



(3) Dirty Wheel Detection



(4) Licenses Detection



## Clients



# Unauthorized Access Control – Face Recognition

Alert will be sent out when unidentified workers want to entering the zone entrance.  
Only pre-defined workers can be granted the access and open the door gate





# viMOV

All-in-one



50 Hours Battery Capacity



High Mobility



Industry Leading Accuracy



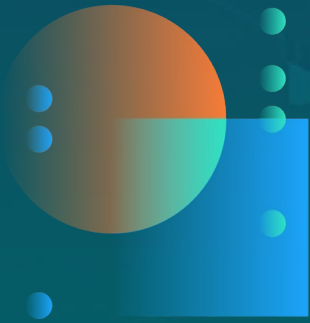
Plug & Play



Wireless Alert System



# Our Advantages



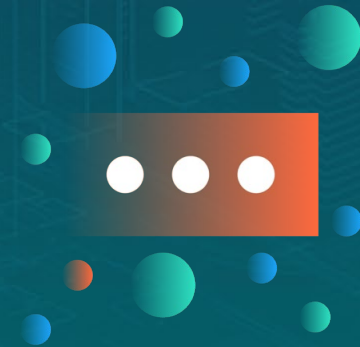
## Simple

- No coding skills required
- 3 steps to implement



## Remote

- One camera | Multi detections
- 'One platform | Multiple sites management



## Synergy

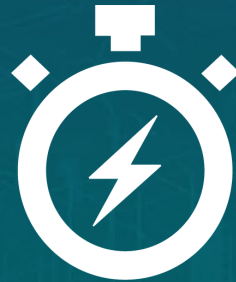
- Technology Integration, super easy!
- 4DBIM, Robotic & IoT

# Value to Customers



**70% ↓**

Man hours for monitoring,  
inspection & supervision



**10x**

10 times faster &  
precise than human  
responses & follow up  
actions



**24/7**

Around the clock  
monitoring  
No human involvement,  
Non-stop

- **Analysis**
- **+100  
Cameras**
- **Simultaneously**



No human being can monitor more than 6 screens at same time !

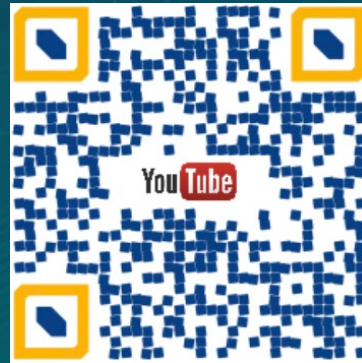
# Contact us to know more



viAct Website



viAct Twitter



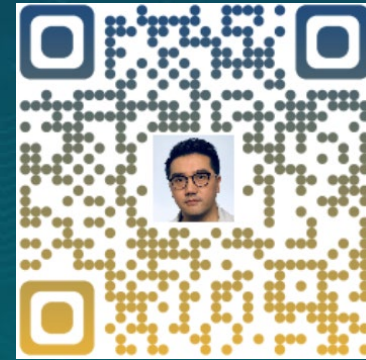
viAct Youtube



viAct LinkedIn



CEO Gary's LinkedIn



COO Hugo's LinkedIn

