

# ICAM-540 Industrial AI Camera User Cases

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# Vision AI Applications In Manufacturing

## 1. Processing

*Object Classification  
;Segmentation*

## 2. Assembly

*Object Detection; Geo-mapping*

## 5. Logistics

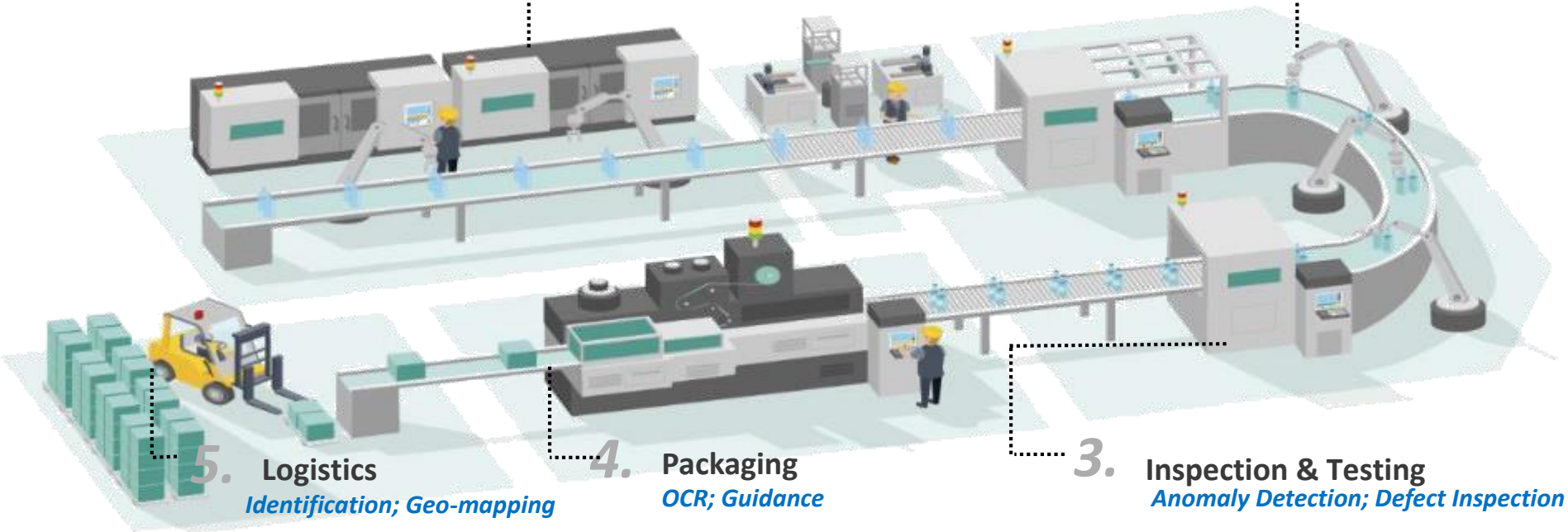
*Identification; Geo-mapping*

## 4. Packaging

*OCR; Guidance*

## 3. Inspection & Testing

*Anomaly Detection; Defect Inspection*

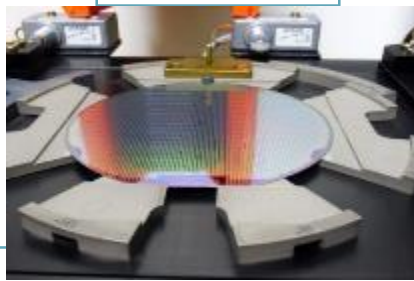


# Application Field

## Inspection



Automotive



Semiconductor



Food and Beverage

## Safety



Machine Tool



Warehouse

# Case 1 – Electronic Fence



User Background: A mechanism vendor in Taiwan.

User Scenario: Prevent hands reach red zone area while operating [Stamping Press machine].

Application

Object  
Detection  
(Hands)

Judge Hands  
Touch Red  
Zone

Alert



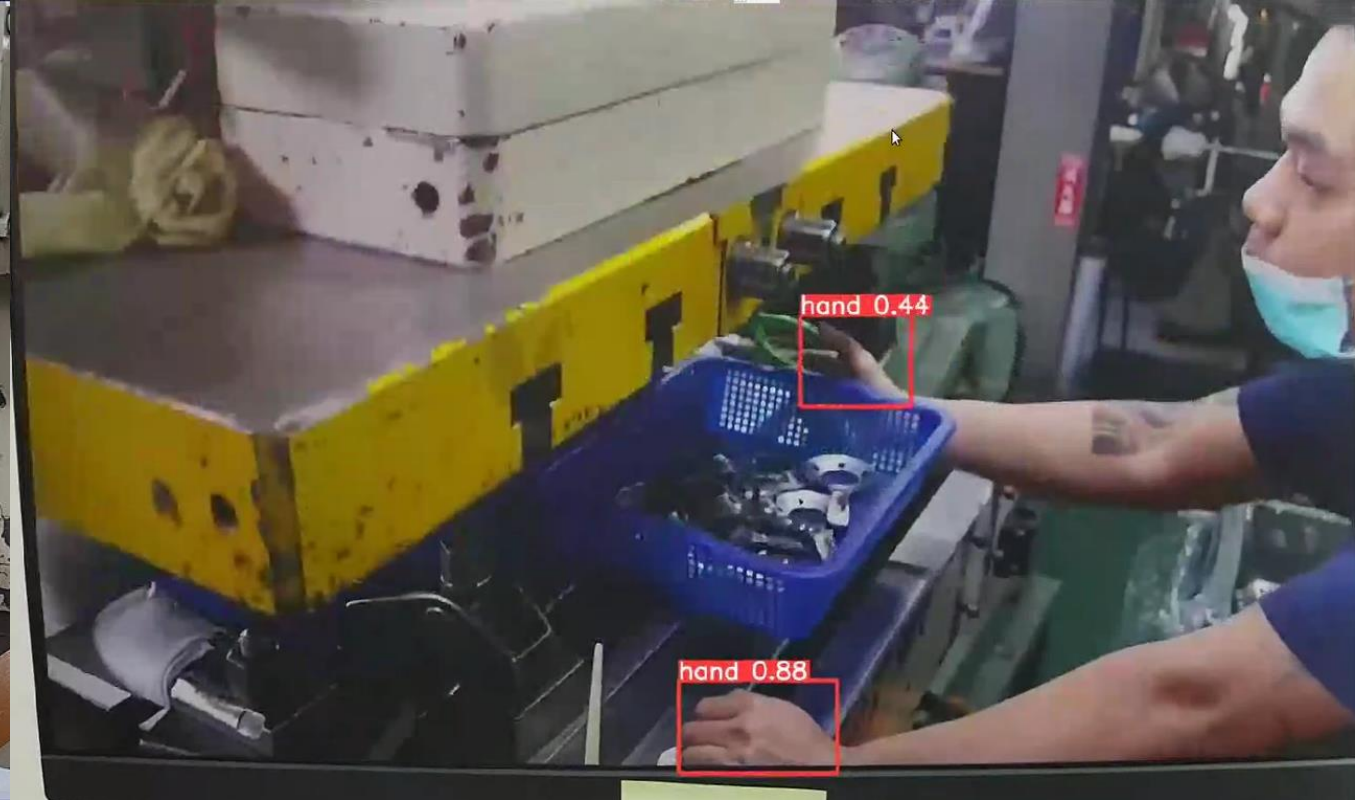
CamNavi

Adjust  
camera  
parameter

Camera  
mode =  
Continuous



# Case 1 – Electronic Fence



# Case 2 – OV20i, AI Vision System



User Background: OV20i, developed by Overview in US.

User Scenario: Solve inspection tasks in minutes without writing a line of code.



## Smart Alignment

Finds and aligns parts accurately reducing the need for fixtures and lighting.



## AI Inspection Algorithms

Presence/absence, Quality grading, Assembly verification, Defect detection and classification.



## I/O and Logic Builder

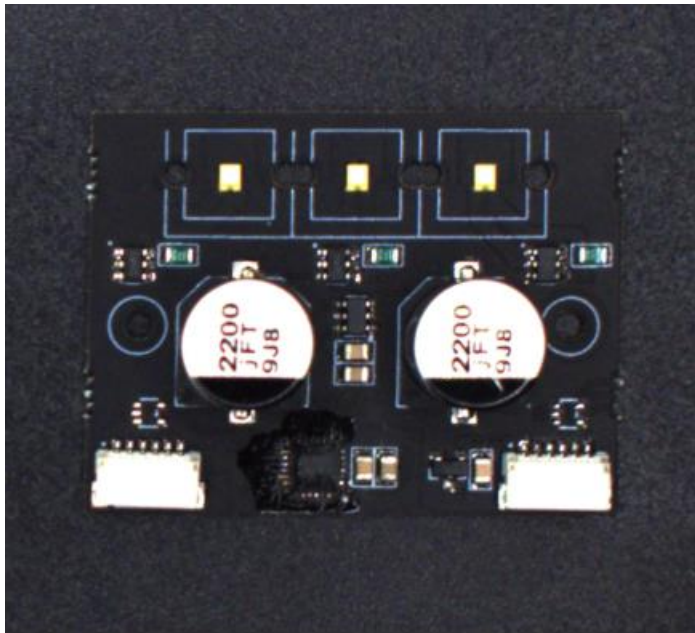
Control the onboard I/O with flexible drag-and-drop logic. Use Node-red to easily connect external systems.

# Case 2 – OV20i, Application

## Reliable Assembly Verification

With ease using Overview's AI Classifier.

Quickly train and identify missing parts, incorrect assemblies, and anomalous defects, and more.



## Powerful surface defect detection

With OV20i's Defect Detection tool.

As few as 5 samples, the OV20i accurately finds and categorizes defects beyond just pass/fail.



## Continuous process inspection

Continuous manufacturing applications including flooring, textiles, are easy with the OV20i's high speed onboard GPU





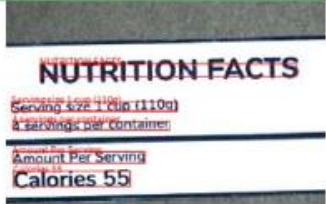
# Case 3 – OCR (Optical Char Recognition)



User Background: System Integrate partner in Taiwan.

User Scenario: Read the text in image for product traceability or check expiration date.

## Applications



Product Nameplate



Product label



Product expiry date

## AI OCR Diagram

