THE ASSEMBLY SHOW

ASSEMBLE. AUTOMATE. ACCELERATE.

Leveraging AI and Computer Vision to Transform Quality Control and SOP Monitoring in Manufacturing

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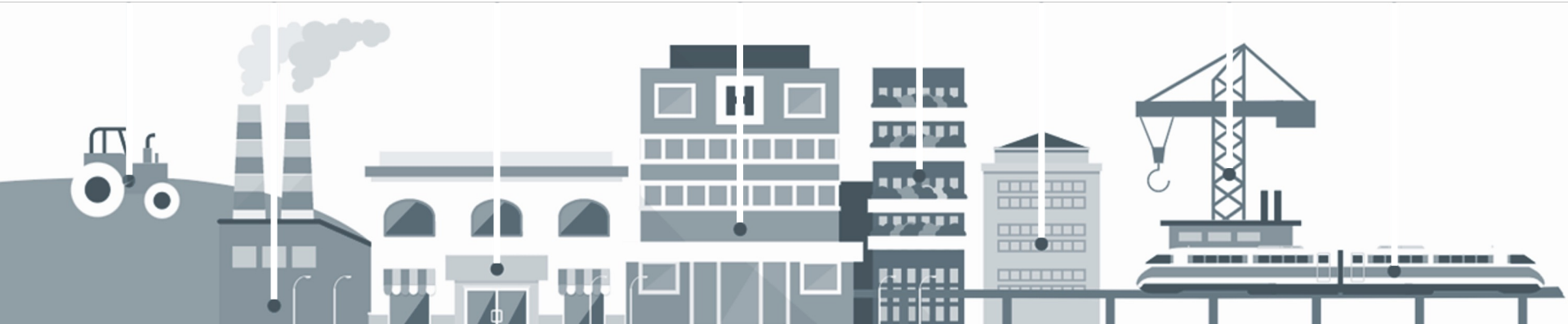

The leading provider of
AI-based computer vision applications
for the manufacturing and logistics sectors

Our Key Client Base

- Tier 1 Automotive Suppliers & OEMs
- Worldwide 3PL / Warehouse Providers
- Global Medical, Pharma & Chemical Manufacturers
- Industrial / Food Manufacturers

200+

Deployment locations worldwide

30+

Years experience in digital solutions

AI/CV

Deep expertise in engineering scalable solutions

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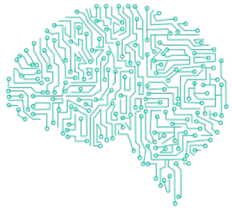
What is all the buzz about?



Artificial Intelligence

Systems that can perform tasks that typically require human intelligence

Machine Learning

Subset of AI that enables machines to learn from data and make decisions

Deep Learning

Subset of Machine Learning that uses neural networks to analyze/interpret data

Computer Vision

Enables computers to interpret and understand visual information from the physical world

Machine Vision

Uses cameras and sensors to capture and analyze visual data based on rules

Generative AI

AI system that possesses human-like intelligence and can perform intellectual tasks

Advancements in AI and Computer Vision Technologies

Key improvements in AI software technology has enabled **low-cost cameras** to be leveraged for **advanced computer vision applications**

Deep Learning

Deep learning boosts accuracy and efficiency in computer vision

Low-Cost High-Quality Cameras

High-quality vision systems are now affordable with modern camera tech

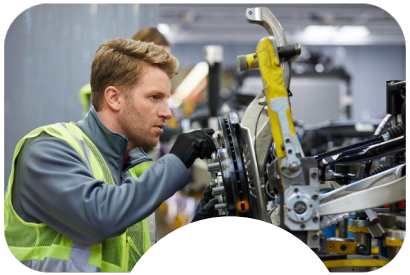
Scalability & Repeatability

AI advances make scalable and reliable computer vision possible

Key Challenges Facing Manufacturers

Manual Inspections

Prone to errors, time-consuming, and inconsistent



SOP Adherence

Hard to track and enforce across multiple production lines

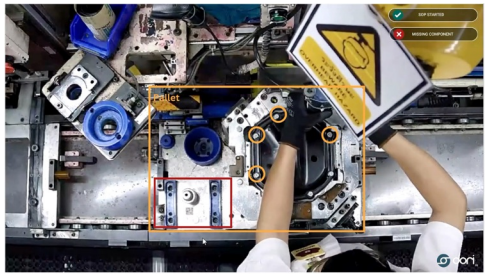
Reactive Processes

Lack of real-time insights leads to reactive quality control

$6.6T* being lost each year

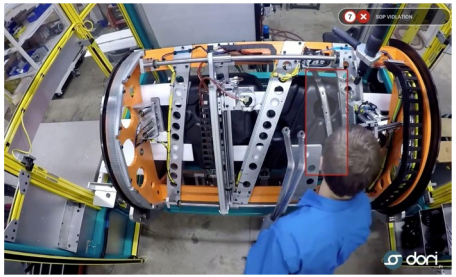
** Source: Bureau of Labor Statistics, Venture Beat*

Why Computer Vision is the Solution?



Automated Inspections

Real-time defect detection and SOP compliance tracking



Proactive Monitoring

Alerts for anomalies before they become bigger issues

Higher Accuracy

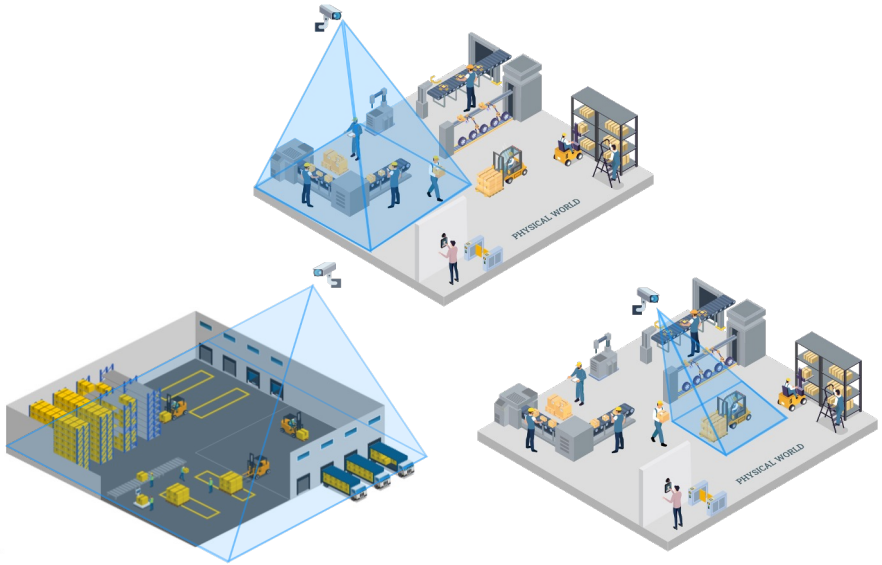
AI reduces errors compared to manual checks

Applications of Computer Vision in Manufacturing

Incoming Quality Checks
Inspection of raw materials / parts before production.

Kitting Validation
Ensures correct components are kitted before assembly.

In-Line Quality Inspection
Detects defects or irregularities during production.



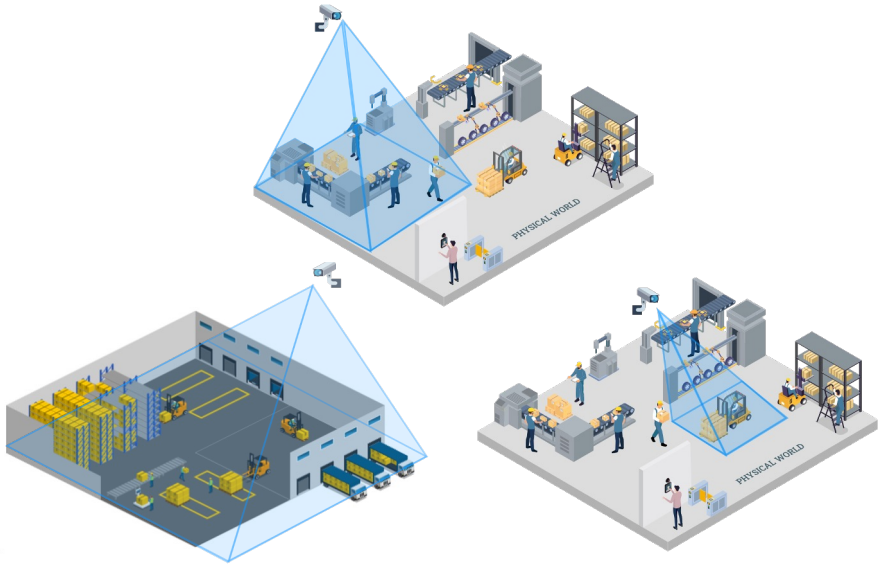
Dori AI can automatically recognize and understand all processes and assets

Applications of Computer Vision in Manufacturing

SOP Monitoring
Ensures correct assembly steps are followed in real-time.

Final Inspection of Finished Goods
Verifies product quality before shipping.

Counting and Packing
Validates correct product counts and packaging for shipping.



Dori AI can automatically recognize and understand all processes and assets

AI-Enabled Computer Vision Applications

Automated Quality Inspection

Automates defect and contamination detection to maintain product quality and reduce recalls.

Anomaly Detection

Detects size, color, and shape defects for consistent product quality

Labeling and Print Verification

Ensures label, allergen, and barcode compliance with regulations

Packaging Integrity

Verifies seals for quality and safety, ensuring allergen compliance

SOP Compliance Automation

Ensures adherence to operating procedures like portion control and labeling to meet regulatory standards.

SOP/Assembly Compliance

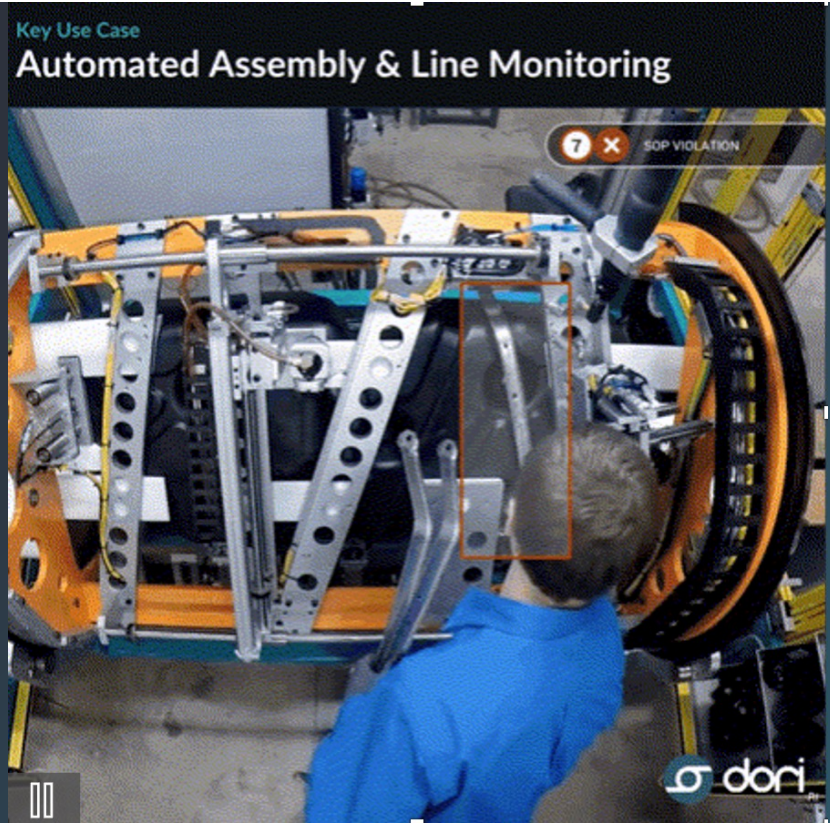
Detect missing parts or steps in SOPs/assembly processes

Operator Analysis / Training

Perform automated cycle time analysis for operator variability analysis

Visual Proof of Record

Store only key footage of each step / assembly for historical records



Warehouse Management

Streamlines inventory management and packaging through automated counting and verification.

Automated Counting and Sorting

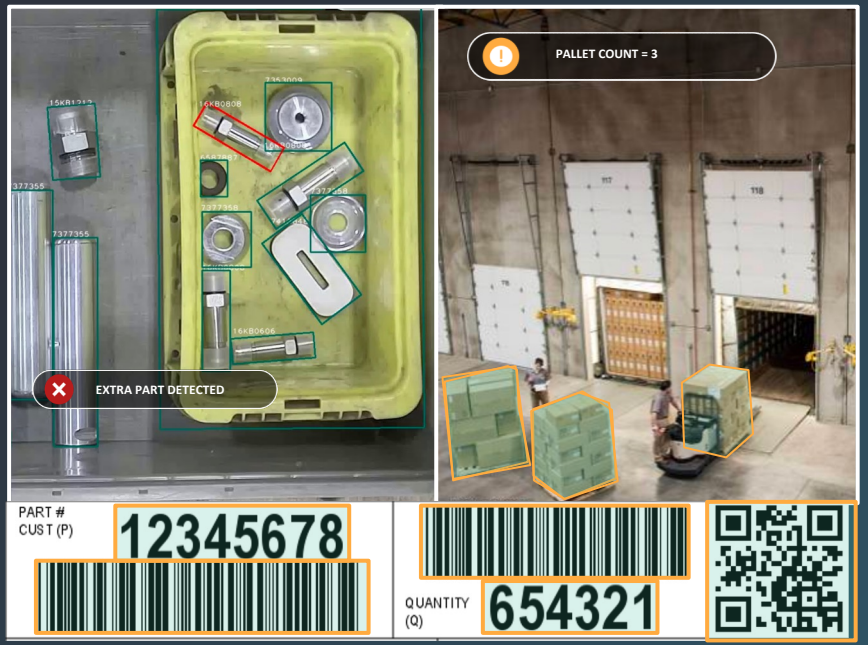
Automates packaging counts for efficient inventory management

Barcode and QR Code Verification

Ensures barcode accuracy for inventory tracking and management

Pallet and Load Inspection

Verifies pallet stacking and integrity for safe transport and storage



Productivity Monitoring

Optimizes efficiency by monitoring material usage, yield, and waste on the production line.

Material Waste Reduction

Detects waste in production, optimizing material usage

Line Utilization / Throughput

Tracks production output to ensure daily quotas are met

Machine / Equipment Downtime

Sends alerts for downtime to minimize costs and revenue loss

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Dori AI Vision Applications

Where to Start with Computer Vision in Manufacturing

Start Small
Begin with a pilot project focused on a specific need

Use Off-The-Shelf Cameras
Leverage affordable hardware to lower initial costs

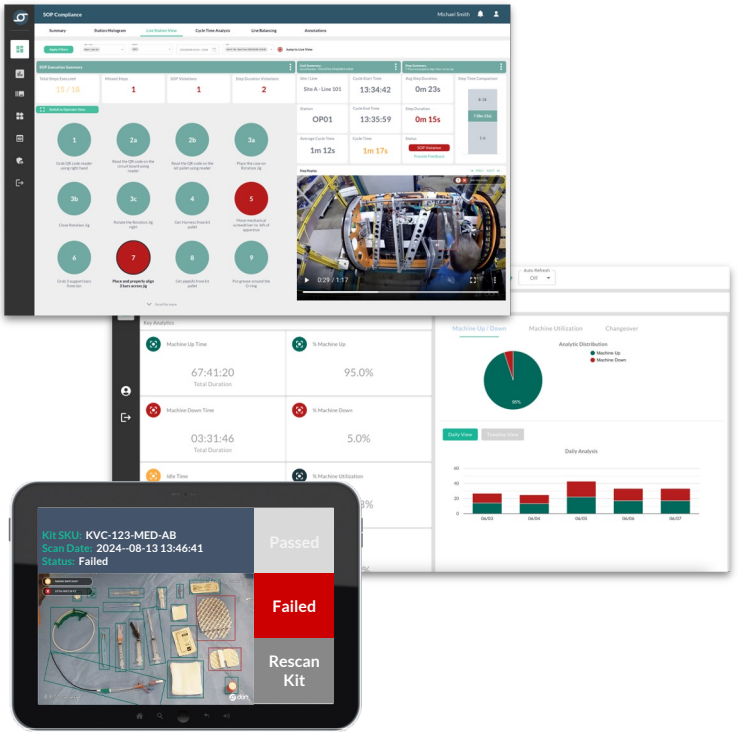
Scale as Needed
Expand across more production lines after initial success

How Dori AI Can Help

Full Managed Service AI
Begin with a pilot project focused on a specific need

Configurable/Tunable Applications
Custom AI models for SOP compliance, kitting, quality checks, and more

Data and Insights
Provides real-time analytics, insights, and historical data

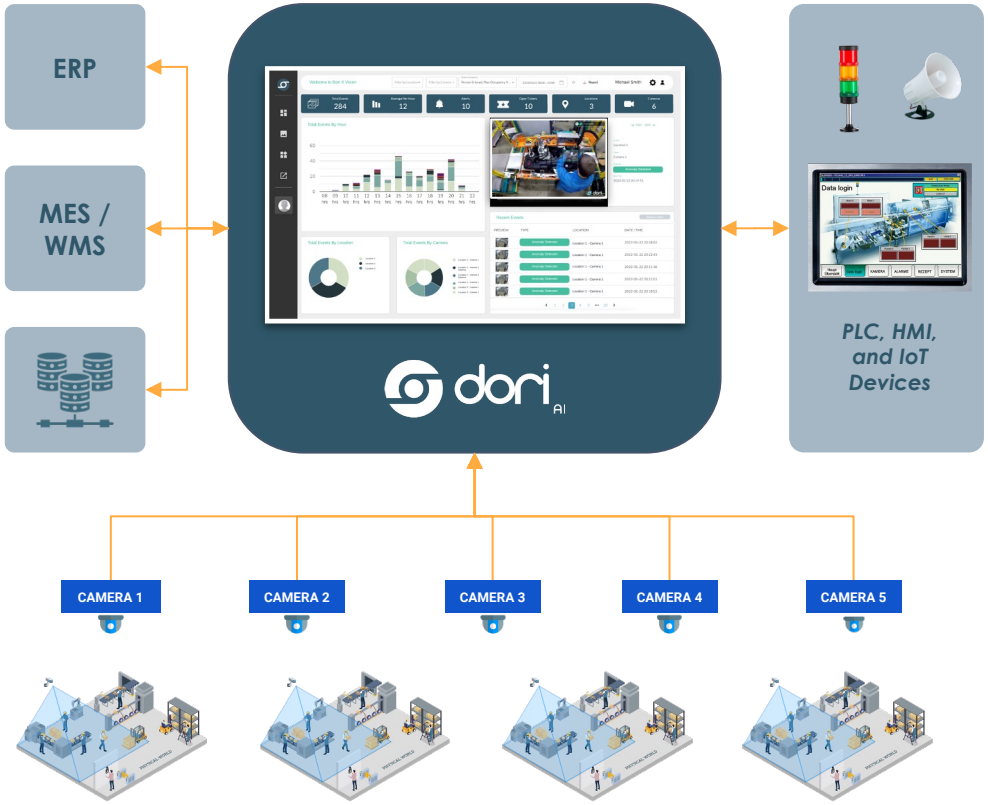


Product Overview

System Overview

How It Works

- Cameras capture station activity
- AI/CV software detects critical events
- Operators and supervisors receive real-time alerts
- Remotely view all historical metrics via dashboards and instantly replay videos



Hybrid cloud + on-premise deployment options are available with Dori AI Vision

Thank you

For further information:

Email Us: contact@dori.ai
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