CTI Resources ACADEMY

AI-DRIVEN VISION INSPECTION: FROM OPEN-SOURCE TOOLS TO INDUSTRIAL EXCELLENCE

MASTER AI VISION INSPECTION AND ACCELERATE YOUR INDUSTRIAL INNOVATION!

Join our immersive 3-day training and elevate your expertise in AI-driven Vision Inspection. Learn how to seamlessly transition from foundational knowledge to advanced industrial applications using cutting-edge tools like AISVISION and Open-Source platform architecture.

Limited Seats Available! Reserve Your Spot Today!

Empower your team, elevate your business, and harness the transformative potential of AI with precision-driven vision inspection solutions.

REGISTER NOW

CTI Resources
DIGITIZED. UNIFIED. OPTIMIZED

Contact us
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www.ctiresources.com.my/training
CTI Resources Academy

CTI Resources Sdn Bhd (421770-T)

COURSE HIGHLIGHTS

- Setup and training with Open-Source platform for object detection and classification
- Complete guidance on AISVISION's powerful development and runtime APIs
- Live integration with industrial cameras for seamless real-time analytics
- Practical assessments and immediate feedback from industry experts

WHAT YOU'LL GAIN

Comprehensive AI Vision Knowledge
Master essential AI concepts in vision inspection, including classification, object detection, segmentation, and anomaly detection.

Hands-on Experience with Open-Source Tools
Learn to set up, train, fine-tune, and evaluate AI models using industry-proven open-source frameworks.

AISVISION Platform Expertise
Gain practical skills in installing, training, and deploying production-ready vision inspection models on the powerful AISVISION platform.

Model Performance Analysis
Evaluate your AI models effectively using critical metrics such as accuracy, precision, recall, and F1-score for robust model assessment.

Efficient Data Preparation and Labelling
Master dataset preparation and labelling techniques with Roboflow and integrated AISVISION tools.

Seamless Production Integration
Learn to export and deploy inference models using AISVISION's runtime API for streamlined integration into your production processes.

Real-Time Monitoring and Analysis
Set up industrial camera systems for real-time data capture, defect detection, and live analysis to enhance operational insights and decision-making.

WHO SHOULD ATTEND

- **Engineers, Technicians, Quality Assurance professionals**
- **AI enthusiasts eager to apply vision inspection in real-world scenarios**
- **Professionals looking to enhance industrial processes through AI**

COURSE OUTLINE

Fundamentals of AI and Machine Learning:

- Introduction to Artificial Intelligence, Machine Learning, and Deep Learning.
- Core concepts of neural networks and their applications in vision tasks.
- Understanding how computer vision emulates human visual processing to analyze digital images and videos.

Practical Vision Tasks:

- Comprehensive coverage of classification, object detection, segmentation, and anomaly detection.
- Practical sessions deploying YOLO architecture for real-time object detection and classification.
- Hands-on with AISVISION Platform:
- Comprehensive introduction to AISVISION software and hardware.
- Step-by-step project management: Object Detection, Classification, Anomaly Detection.
- Data labeling, model training, hyperparameter tuning, accuracy verification, and predictive analytics.

Data Preparation & Model Development:

- Techniques for preparing and labeling datasets using Roboflow and AISVISION integrated tools.
- Model training strategies, accuracy evaluation, and fine-tuning.

Real-Time Deployment and Integration:

- Export trained models to integrate into operational environments.
- API-based automation with AISVISION Runtime.
- Configuring industrial cameras for live data capture, real-time monitoring, and analysis.
- Strategies for streaming and interpreting live operational data.