

Company Profile



Established: August 2018

Head Office: 3-9-28 Koyanagi, Fuchui,
Tokyo 183-0013, Japan



Chofu Lab: 1-1-1 Kojima-cho, Chofu-shi,
Tokyo 183-0026, Japan
UEC Alliance Center 405
The University of Electro-Communications

Hanoi Lab: MITECH TECHNOLOGY INVESTMENT COMPANY LIMITED
15F, Block A, Song Da Building, Pham Hung, Tu Liem, Ha Noi
www.hn.mitech.jp

Business:

- Visual inspection software & algorithm development
- AI & image processing R&D
- Custom software development
- Robot control software development
- FPGA design, programming & device driver development
- Image processing systems & components

Founder & CEO — Dr. Cao Thang

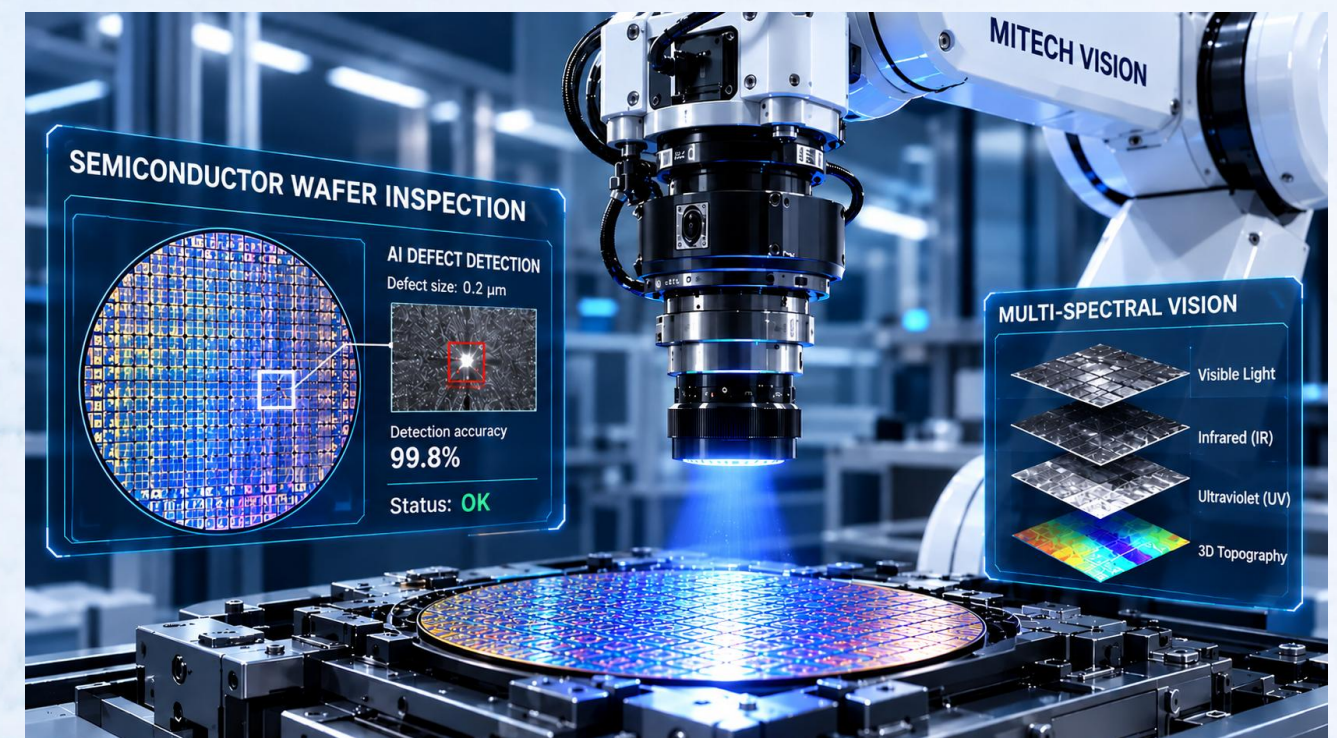
1994/05 B.E. in Electronics Engineering, Hanoi University of Technology
2005/09 M.E., Ritsumeikan University (Science & Engineering)
2008/03 Ph.D., Ritsumeikan University (Science & Engineering)
2013/04 Researcher, The University of Electro-Communications, Tokyo
2013/12 Researcher, The University of Tokyo (Information Science & Technology)
2018/08 Founded MITECH Co., Ltd.



MITECH

Technologies That Give Machines the Power to See and Think

When Inspection Evolves, the Production Line Evolves.
— Innovation Driven by Image Processing & AI



**Comprehensive Expertise in Optics, Imaging, Image Processing,
and AI Model Development**

End-to-End Visual Inspection System Development

www.mitech.jp

Our Track Record



MITECH Software



Since 2003, our founder has been building proprietary AI inspection technology

End-to-end expertise in optics, imaging, AI, and inspection systems

AI is used in approximately 70% of our current projects

Semiconductors | PCB | Medical & Food | Materials | X-ray•SAT | Components



Why MITECH

Inspection Performance × Customization × Cost
Three Strengths for Optimal Inspection Systems

Inspection Performance

- End-to-end expertise, from optics and AI to complete inspection systems.
- We optimize hardware and software together for best-in-class inspection performance.

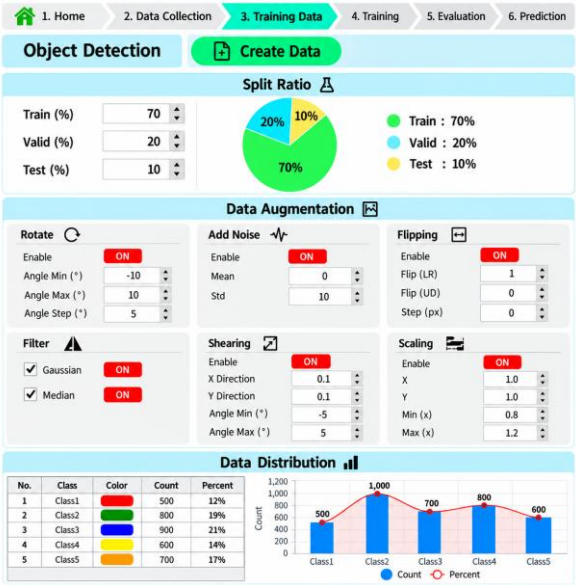
Customization

- In-house platform software tailors AI and image processing to the production floor for higher efficiency.
- Shorter time from selection to deployment.

Cost

- Offshore development reduces costs while maintaining Japanese quality standards.
- Proprietary libraries reduce licensing fees.

● AI Studio — AI Development, Data, Training & Evaluation



① Data Preparation

Collect, sort, and augment images; organize good/defect samples by SKU.

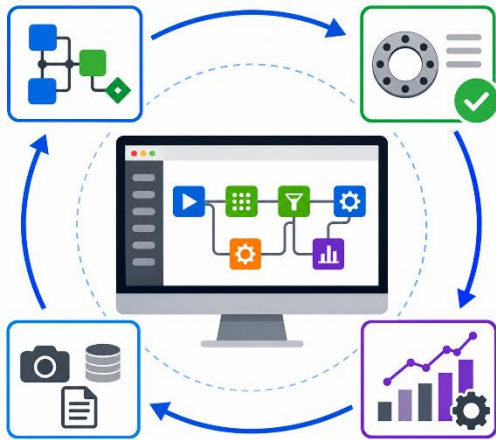
② Training

Train models and optimize parameters for production deployment.

③ Evaluation

- Evaluate accuracy, false detections, missed defects, overfitting, and robustness to environmental variations.
- Add data and retrain as needed.
- Deploy models to inspection software (AI InspeX, AI ScanX).

● Vision Studio — Image Processing, Algorithms & Tuning



① Preprocessing

Normalize, filter, and correct illumination to stabilize images before inspection.

② Alignment

Maintain stable inspection positions even when workpieces shift.

③ Detection & Measurement

Detect defects and patterns, and measure dimensions using transparent, rule-based logic.

④ Tuning & Batch Processing

Run batch processing with different parameters and review intermediate results. Export configured programs to AI InspeX or AI ScanX for production inspection.

● AI InspeX — AI Visual Inspection Software

● AI ScanX — NDT AI Visual Inspection (Image Processing & Good-Sample Learning)

● Production Inspection Software Integration

Supports NDT image data including X-ray (RT), ultrasonic (UT), infrared (IRT), magnetic particle (MT), penetrant (PT), CT, and more—enabling inspection systems tailored to each application.