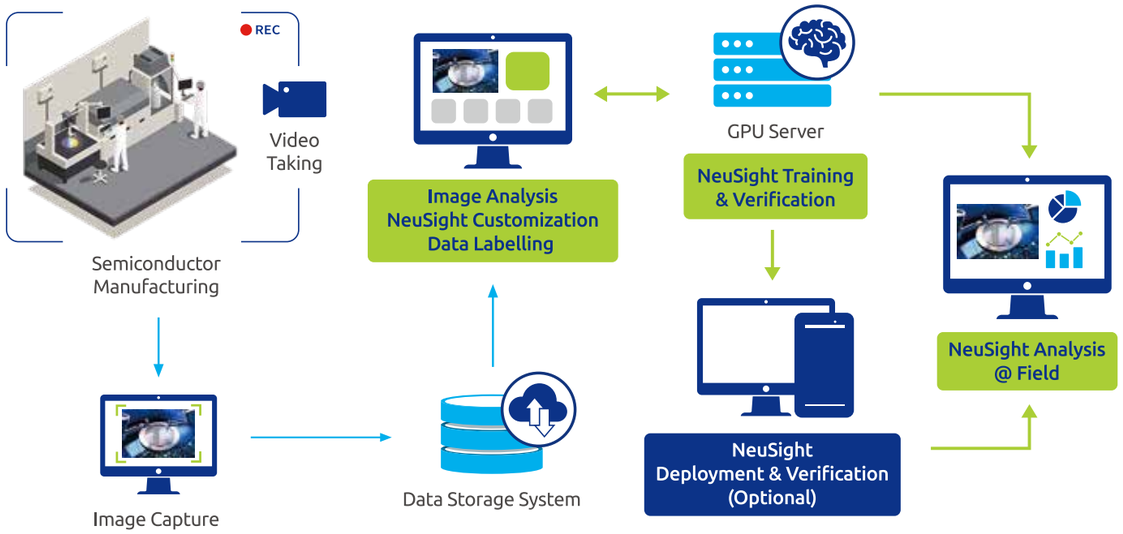
Discover NeuSight

An innovative **AI service** tailored for the machine vision sector, specializing in **Anomaly / Abnormal Detection Applications.**

Benefit from our rapid and adaptable AI model training service, meticulously crafted to **enhance productivity.**

Solution Architecture



NeuSight Service Flow

Step 1 — Problem Definition & Performance Requirements

Step 2 — Dataset Collection, Inspection and Analysis

Step 3 — Data Labelling

Step 4 — NeuSight Customization

Step 5 — NeuSight Training

Step 6 — On-site Verification

Step 7 — Result Analysis and Adjustment

Our Strength

Customizable AI-as-a-Service

Integrates seamlessly into your existing workflows, enabling effective and efficient defect detection.

Maximize Production Yield

Ensure quality consistency, maximize production yield as well as minimize defect damages and costs.

Eliminate Manual Inspections

Cutting-edge defect detection AI solution.

Benefits of NeuSight

High Economics with High Compatility AI Model

- Takes only 6 GPU cards for around 35K videos per day
- Save more than 40% deployment cost

Quicker Detection AI Model

30x fasters of video detection compare with existed solutions in the market

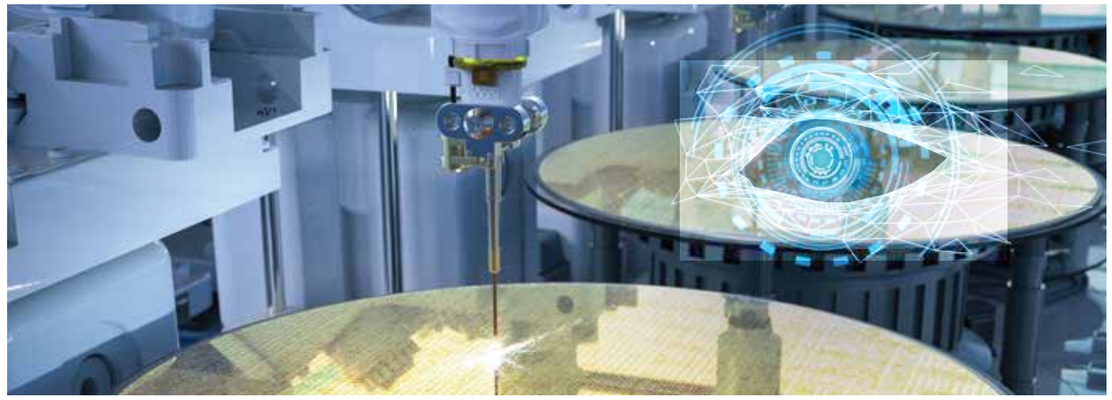
High Accuracy

Zero false alarm rate

Flexible & User Friendly

Customizable per use case with adaptable deployment selection

Case Study: Enhancing Yield Rates in Semiconductor Manufacturing with NeuSight AI



Solution: NeuSight AI for Litho Abnormal Detection

NeuSight, an innovative AI service specializing in anomaly detection applications, stepped in to address the client's challenges. Leveraging NeuSight's rapid and adaptable AI model training service, the client embarked on a journey to enhance their anomaly detection capabilities in lithography.

Customer Challenge:

In semiconductor manufacturing, lithography plays a critical role in creating intricate patterns on silicon wafers. However, even minor anomalies or defects in the lithography process can lead to significant yield losses and impact the final product's quality. The client faced challenges in accurately detecting and swiftly addressing anomalies during the lithography process, impacting their yield rates and overall productivity.

The Implementation Process

Data Integration and Analysis

NeuSight worked with the client to integrate diverse data sources from the lithography process, including imaging data and sensor readings. Through comprehensive data analysis, NeuSight identified key patterns and anomalies critical for effective detection.

Custom AI Model Development

Leveraging advanced machine learning algorithms, NeuSight developed a custom AI model tailored to the client's specific lithography anomaly detection needs. The model was trained on extensive datasets to ensure robust performance and high accuracy.

Deployment and Optimization

NeuSight deployed the AI solution across the client's infrastructure, optimizing performance for GPU servers, on-premise systems, and cloud platforms. Rigorous testing and fine-tuning were conducted to ensure seamless integration and maximum efficiency.

Results:

Enhanced Anomaly Detection

Delivered superior accuracy and speed

Enabling early intervention and mitigation of defects

Improved Yield Rates

Substantial increase in yield rates

Optimizing resource utilization

Streamlined Deployment Process

Facilitated seamless integration with the existing infrastructure

Minimizing downtime and disruption

Cost Savings

40% in equipment and 70% in server room services

Led to a 70% reduction in electricity bills

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