LTIMindtree

Case Study

Computer Vision-based Solution for Quality Control for Leading Automotive OEM

Client is a fortune 100 automobiles manufacturer that combines the power of robotics, AI, and energy solutions to bring the freedom of mobility to over 150 countries and territories around the world.

Business Challenges

☑ Reduce time and improve efficiency of quality inspection process

☑ Eliminate manual errors during quality check

☑ Accelerate root cause detection of the defect

LTIMindtree Solutions

☑ Developed computer-vision based solution @ Edge with help of AWS services for porosity detection on cast aluminum cylinder head on machine line pf powertrain plant

☑ Processing decisions on cloud-based ML model analyzing images/videos captured by specialized cameras

☑ Trained the ML model for better accuracy and decisions and built operator interface for faster decision making

☑ Migrated solution from cloud to EDGE hardware and validated model precision and accuracy

Business Benefits

100% Defect detection & Quality conformity

Faster Corrective Actions

Wastage Control & refabricating recoverable finished products