Roadway Monitoring based on our AI Image Technology

Abstract

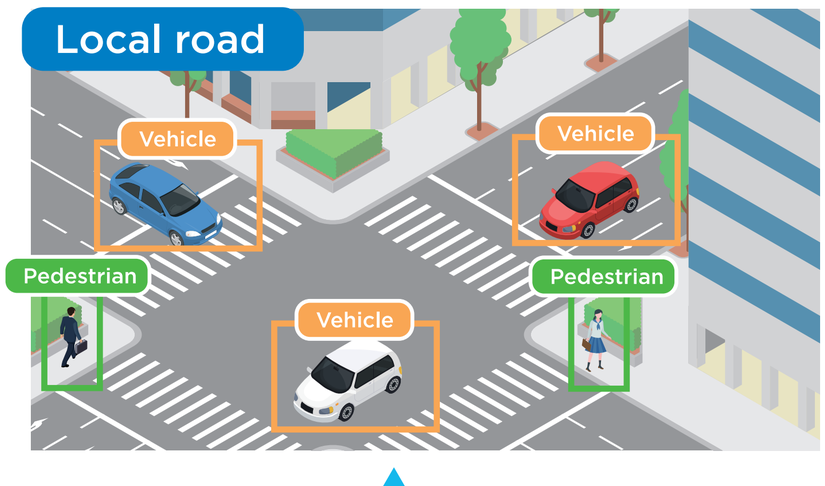
Our image AI technology, based on our edge AI processing units and AI algorithm, enables safer and smoother traffic flow.

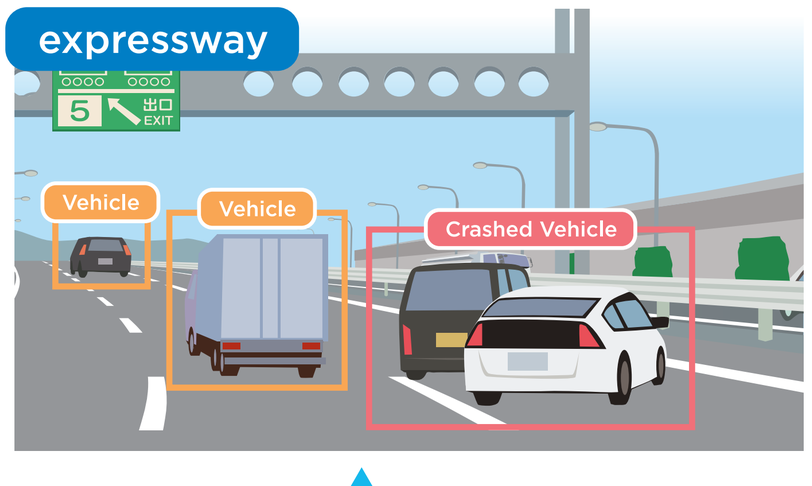
Details

In addition to basic sensing such as detecting vehicles and pedestrians on roads, our technology identifies incidents, wrong-way drivers, and intruders, supporting traffic monitoring and management, and safety assurance.

Surveillance Camera





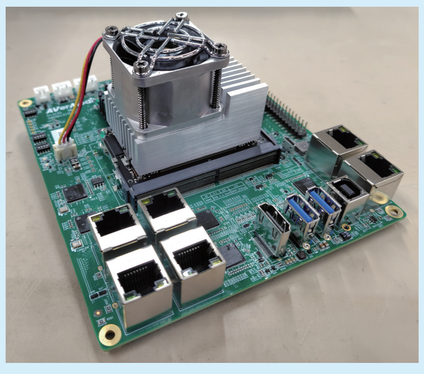


Real-time analysis of camera and video on the AI Edge Processing Board

Core function

- Detection and Classification of Pedestrians and Vehicles
- Vehicle Count Detection
- Vehicle Speed Detection
- Camera angle Correction
- Traffic queue length detectoin
- Vehicle turning ratiomeasurement

AI Edge Processing Board



Proprietary technology
Equipped with NVIDIA GPU

Event Detection function

- Wrong-way driving detection
- Road Intruder detection
- Stopped vehicle detection
- Crashed vehicle detection
- Fallen object detection

Local Road

Supports traffic control at signals and intersections, as well as violation enforcement.

- Traffic enforcement
- Traffic monitoring
- data Utilizatoin
- Safe and Secure Community

Expressway

Supports expressway monitoring and management, songestion countermeasures, and safe operations.

- Congestion Monitoring & countermeasures
- Incident Detection & Response
- Toll Gate/Traffic Volume Management

Future Plan

In 2028, we will deliver AI processing units for CCTV deployed in tunnels.

SUMITOMO ELECTRIC GROUP