

Kamijo LAB.

[Safety for Pedestrian and Vehicle]

Center for Information Fusion

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Applied Multimedia Information Processing

Information Science and Technology

Information and Communication Engineering

Sensor Technologies for Road Safety

Safety Assistance System using On-board Sensors

The traffic accidents still remain as a serious problem. We proposed the robust tracking algorithms and developed the sensors to detect the abnormal flow of vehicles or pedestrians imminent to collision. Our ultimate goal is to protect vulnerable road users and increase the road safety by implementing safety assistance system.

◆ Safety system by image sensor

Setting off sudden congestion alarm for following vehicle

Pedestrian Detection and Tracking using Monocular Camera.

◆ Intersection safety by wireless sensor method

Evaluation and development of wireless sensor method using RSSI data

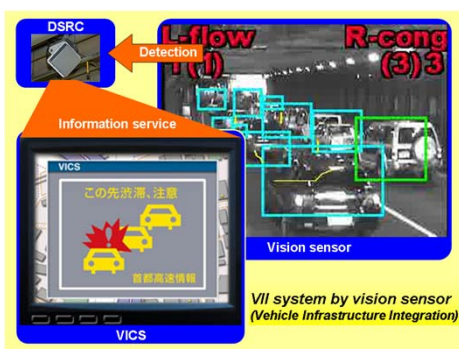


Fig 1. Infrastructure-Vehicle cooperative safety system



Fig 2. Pedestrian detection by monocular on-board camera

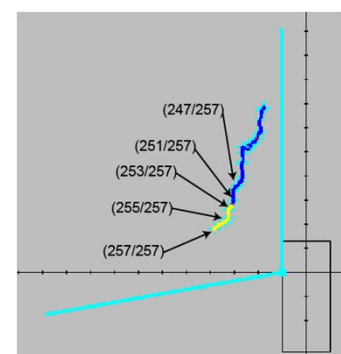


Fig 3. Relative trajectory of pedestrian

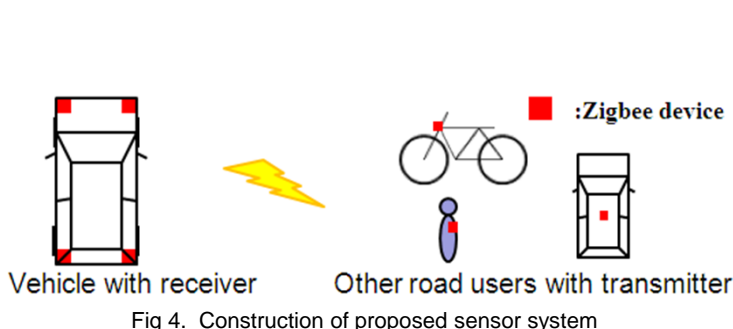


Fig 4. Construction of proposed sensor system

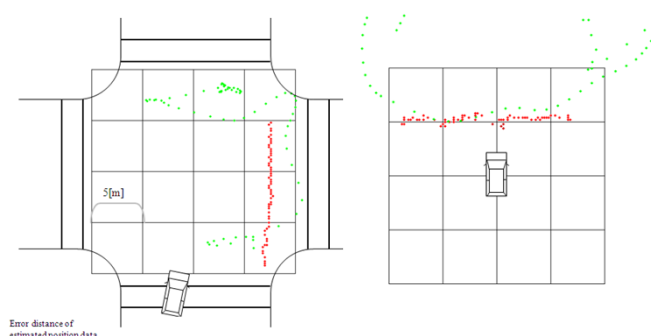


Fig 5. Evaluation of position estimation accuracy