

# KAMIJO LAB.

## [Enhanced Mobility and Location Service]

Center for Socio-Global Informatics

Applied Multimedia Information Processing

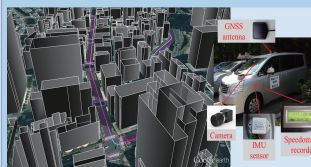
Emerging Design and Informatics Course

Department of Information and Communication Engineering

[http://kmj.iis.u-tokyo.ac.jp/e\\_index.html](http://kmj.iis.u-tokyo.ac.jp/e_index.html)

### Autonomous Driving

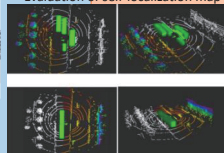
#### Self-localization of a car in an urban environment



Self-localization using sensor fusion

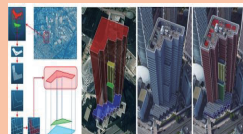


Evaluation of self-localization map

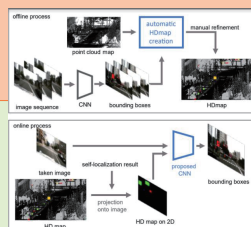


Self-localization using map

#### Generation of 3D map using 3D point cloud and GNSS



Generation of 3D map

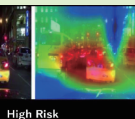


Road object detection using map

#### Scene understanding of urban environment



Low Risk



High Risk

Driving scene risk assessment



Pedestrian detection and estimation

### Marketing

#### Mobile device-based services



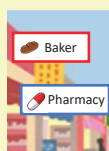
- Acceleration
- Angular velocity
- Magnetic compass
- Atmospheric pressure



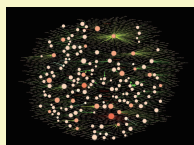
Indoor behavior understanding using smartphone sensors



Tourist service using location and photo data



#### Market strategy using SNS analysis



Instagram analysis using deep learning

At Kamijo laboratory, we conduct research on realizing safe mobility using location and scene understanding technologies, in addition to research on novel methods in the marketing field.

