

# KAMIJO LAB.

## Enhanced Mobility and Location Service



Department of Informatics and Electronics  
Advanced Mobility Research Center (ITS Center)

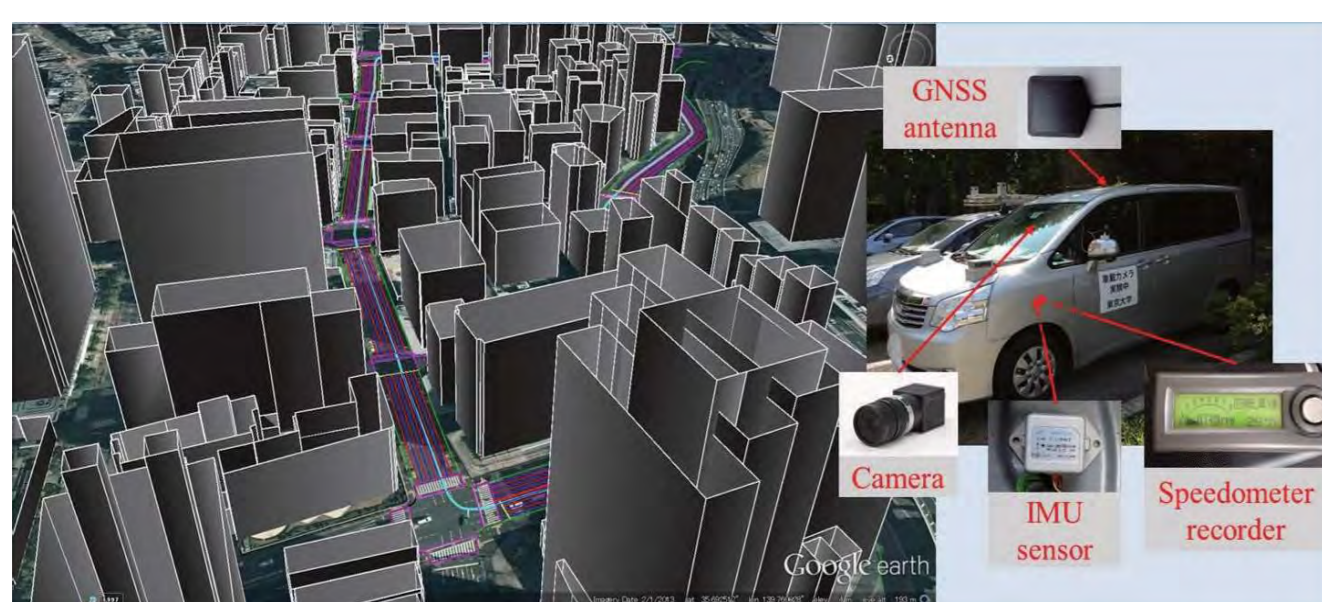
Department of Information and Communication Engineering,  
Graduate School of Information Science and Technology  
Department of Interdisciplinary Information Studies,  
Graduate School of Interdisciplinary Information Studies

Applied Multimedia Information Processing

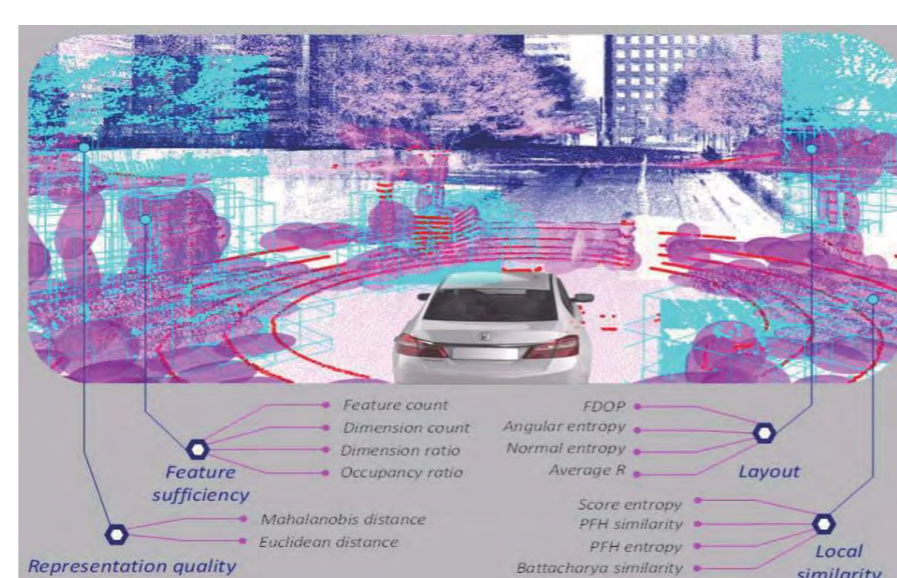
<http://kmj.iis.u-tokyo.ac.jp>

### Autonomous Driving

#### Maps & Self-Localization in Urban Area



Self-Localization with Sensor Integration

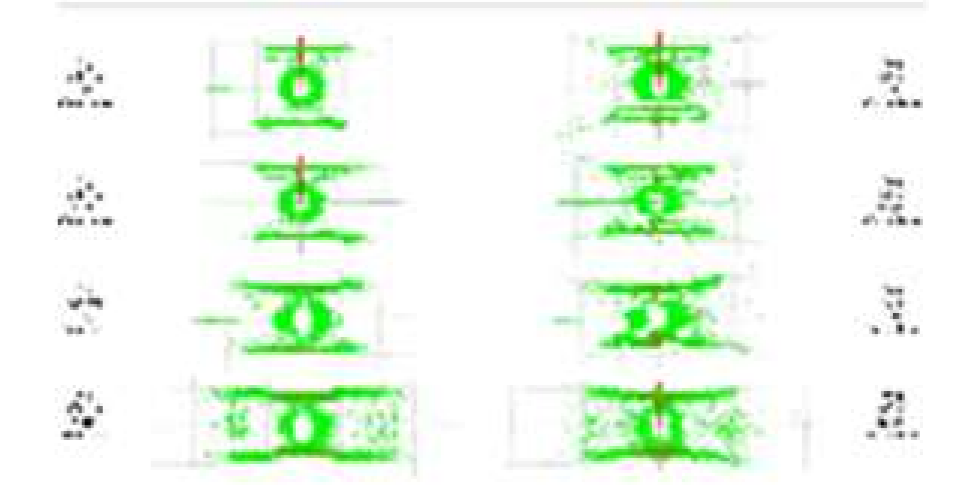


Map Evaluation for Self-Localization

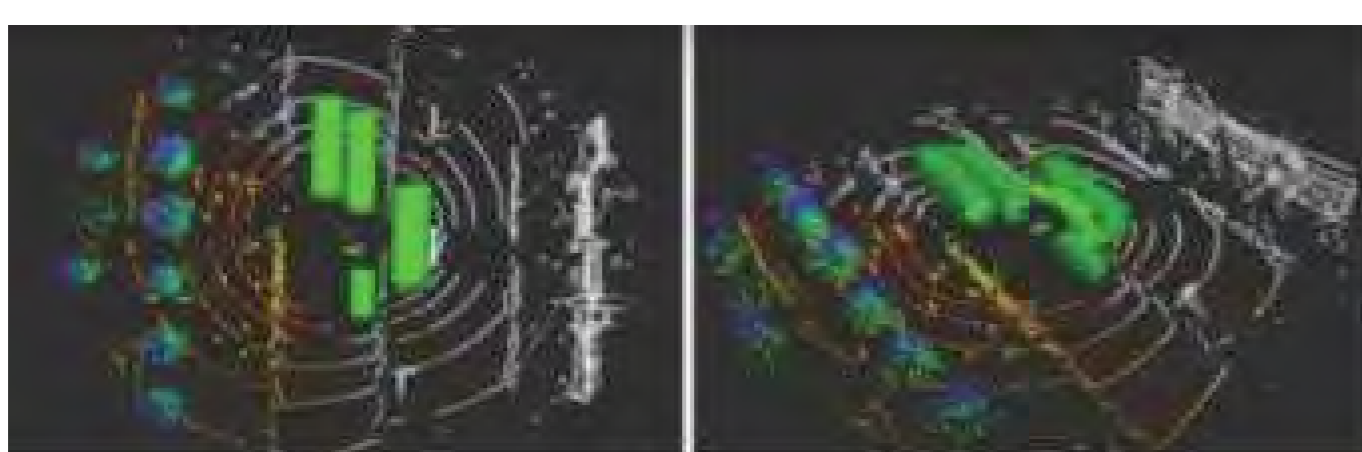
#### Sensing Simulation under Bad Condition via Generative Models



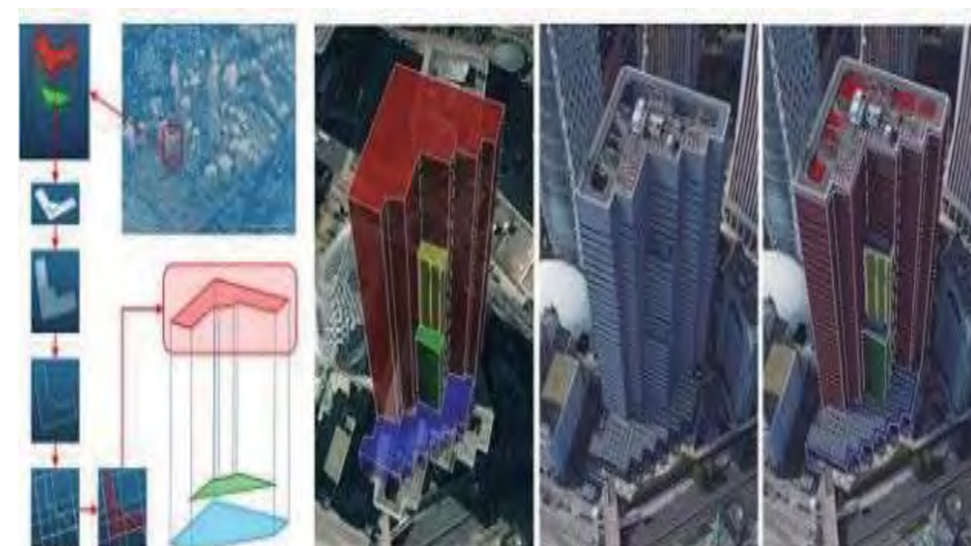
Day-to-Night Image Translation



LiDAR Points Style Translation



Occlusion Effects for Self-Localization



3D Map Generation

#### Scene Understanding



Low Risk



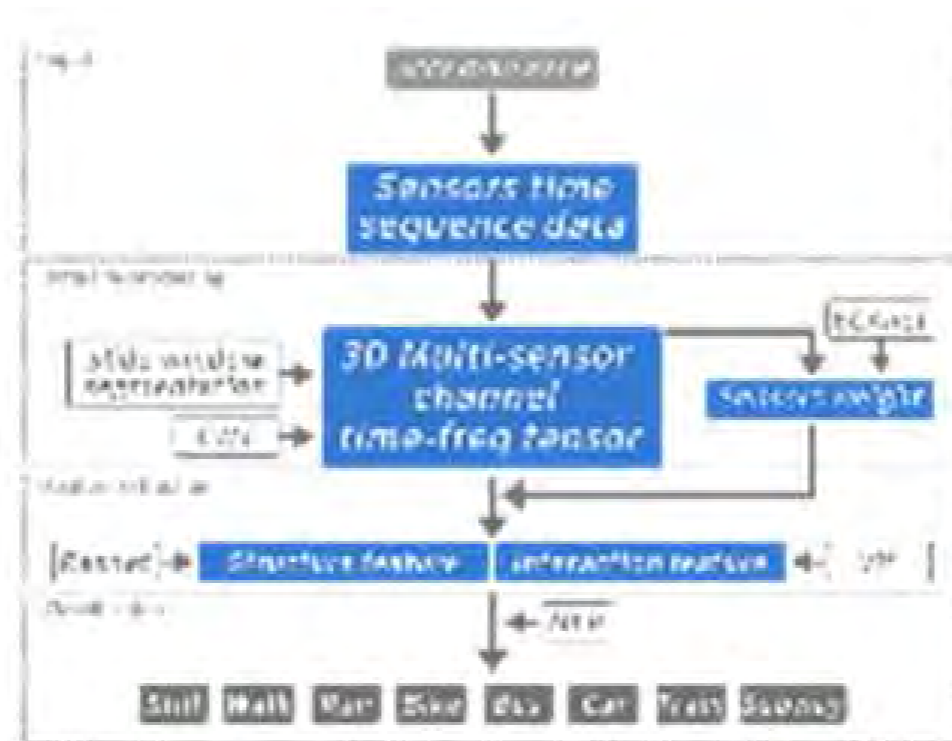
High Risk

Risk Assessment for Driving

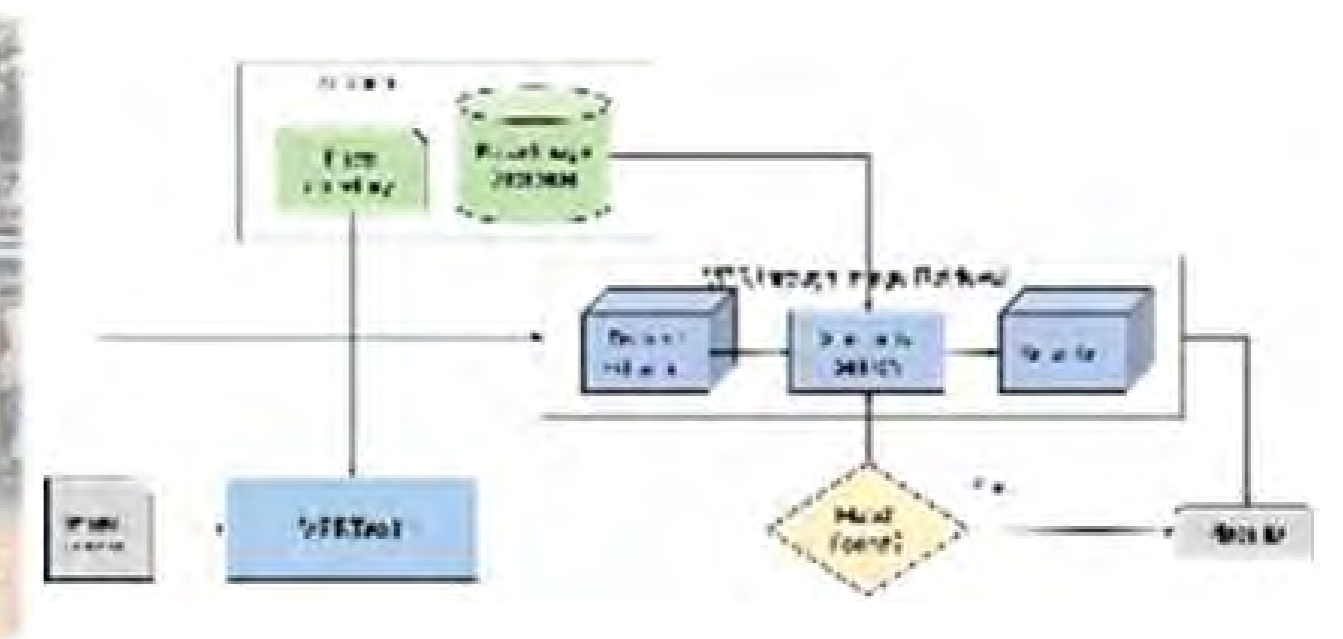
### Portable & Wearable Application



Indoor Action Recognition & Transportation Mode Detection using Smartphone



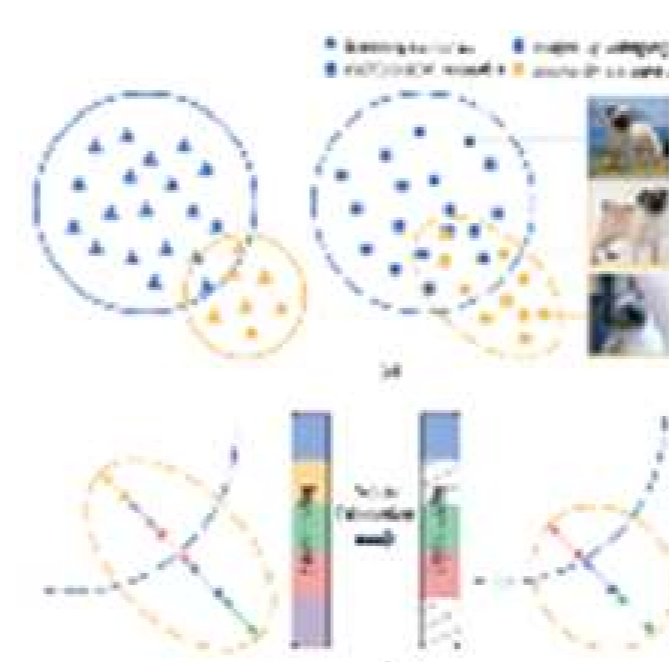
Position Estimation Framework using Smartphone via Image Retrieval



### Deep Learning



Line Generation for Manga Drawing using Generative Models



Efficient Training of CGANs for Class Imbalanced Data

TT: True skill Training, testNAS Framework



Neural Architecture Search

