KAMIJO LAB.

Enhanced Mobility and Location Service

Department of Informatics and Electronics

Applied Multimedia Information Processing
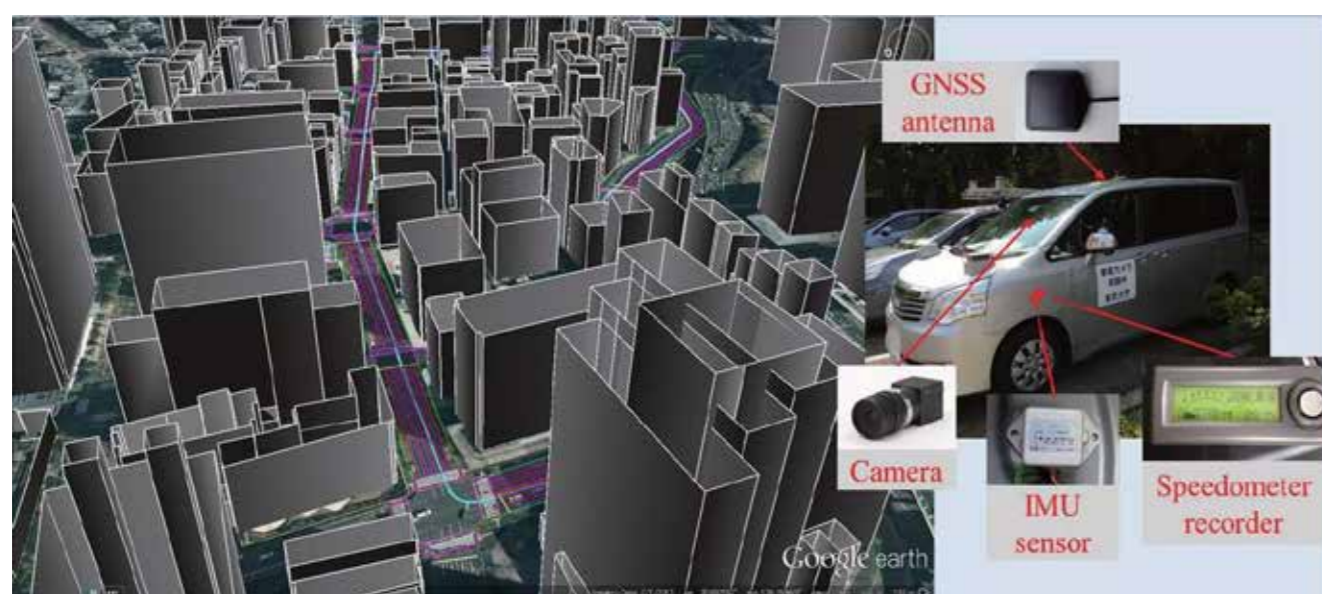
Emerging Design and Informatics Course, GSII
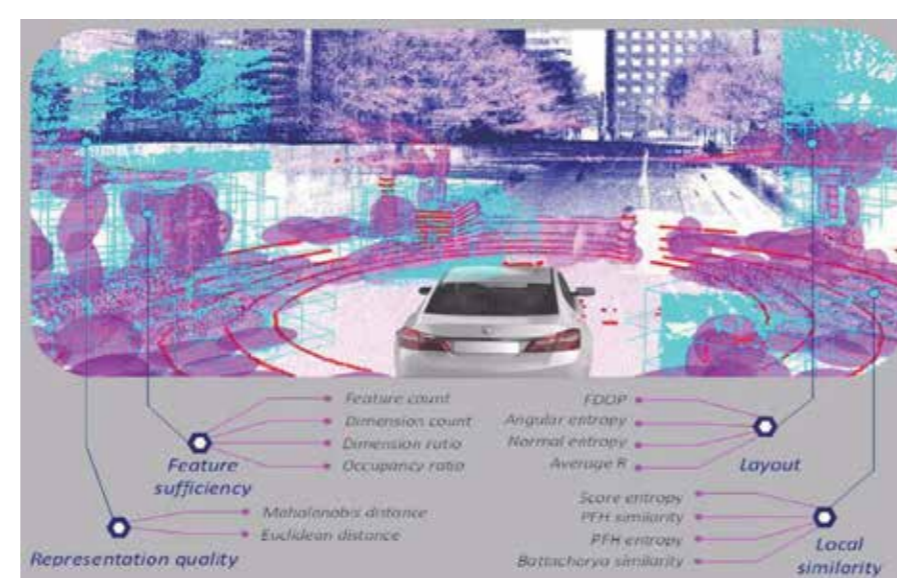Department of Information and Communication Engineering, GSIST

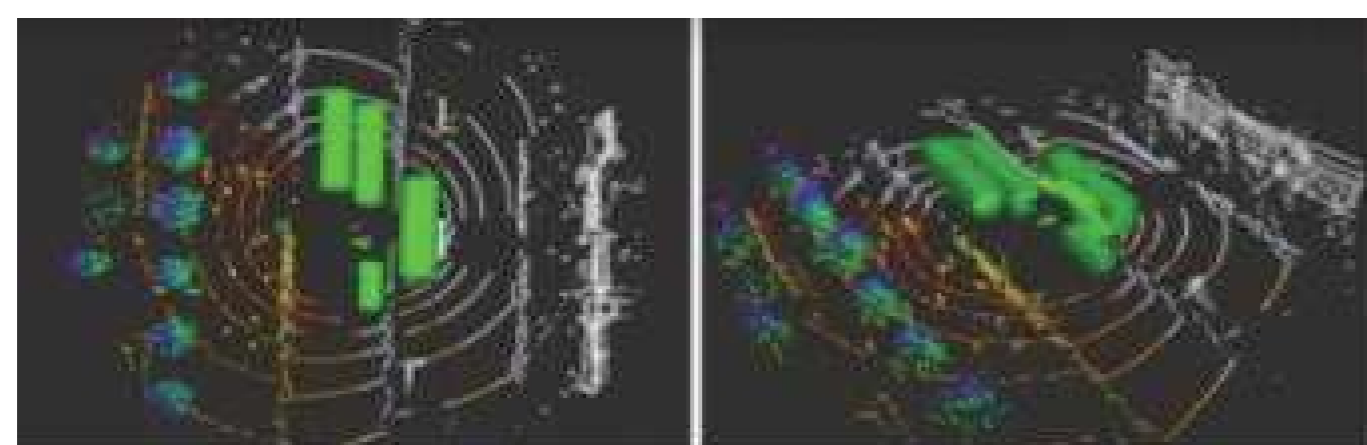http://kmj.iis.u-tokyo.ac.jp/

Autonomous Driving
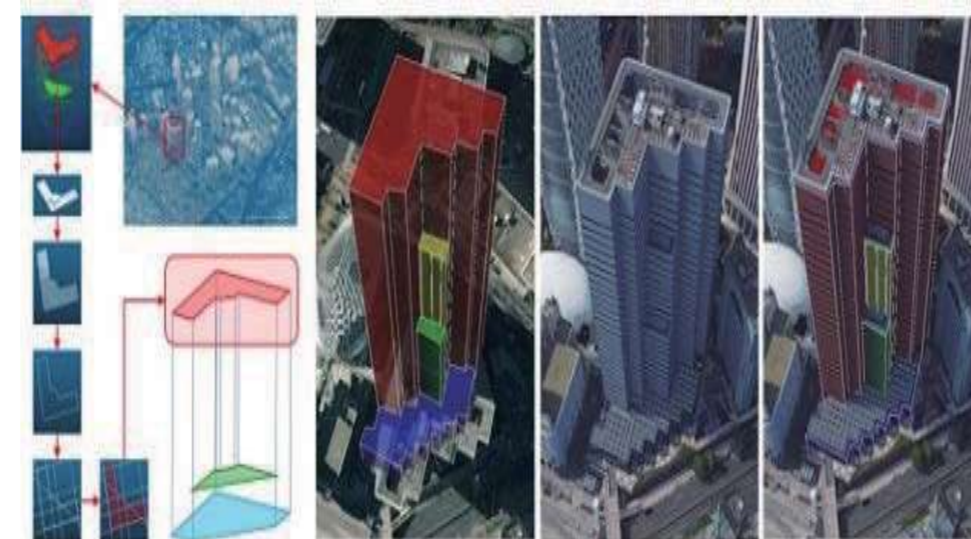
Maps & Self-Localization in Urban Area

Self-Localization
with Sensor Integration

Map Evaluation
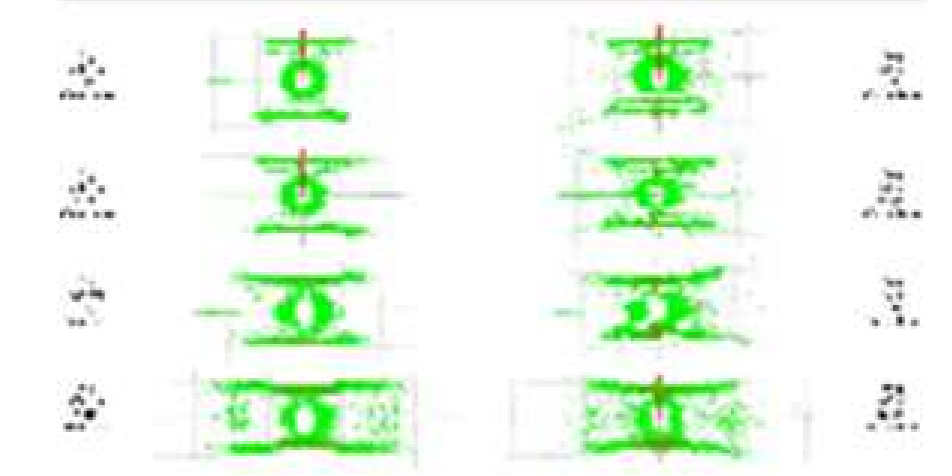for Self-Localization

Occlusion Effects
for Self-Localization

3D Map Generation

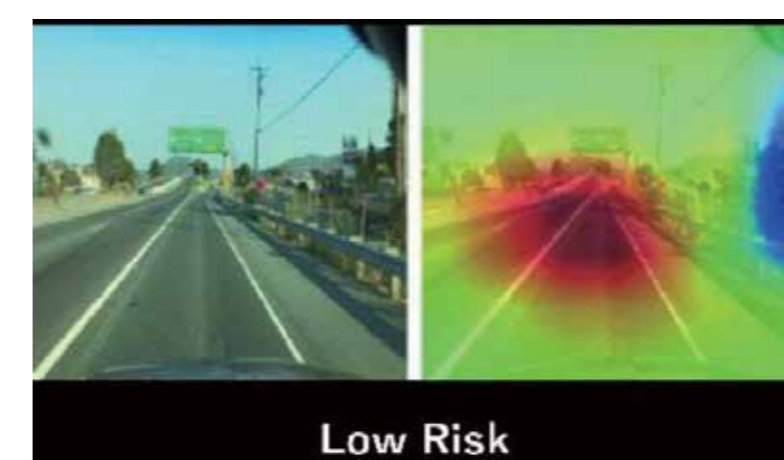## Sensing Simulation under Bad Condition via Generative Models

(a) Real day image   (b) Fake night image
BDD100K dataset

Day-to-Night
Image Translation
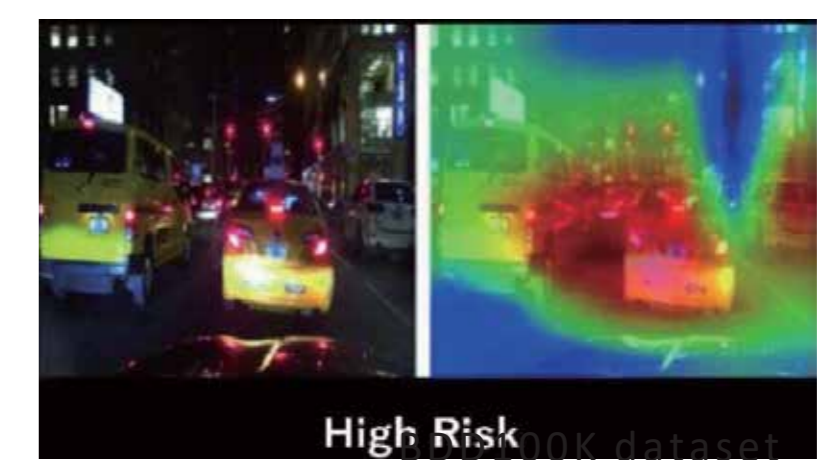

LiDAR Points
Style Translation

Scene Understanding

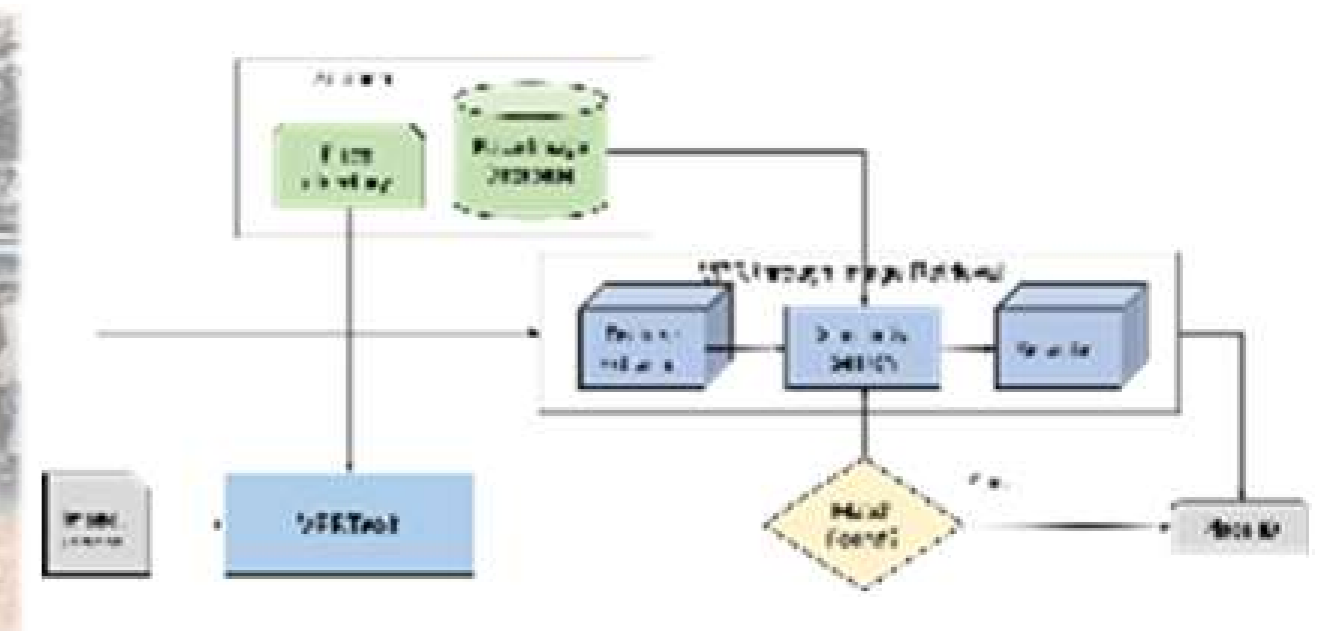
Low Risk   High Risk

Risk Assessment for Driving

Portable & Wearable Application

- Acc
- Gyro
- Mag
- Press

Indoor Action Recognition &
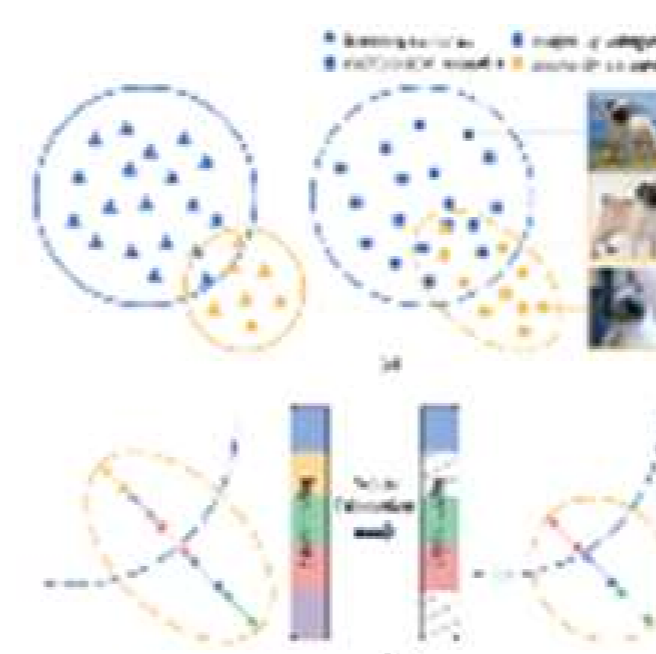Transportation Mode Detection
using Smartphone
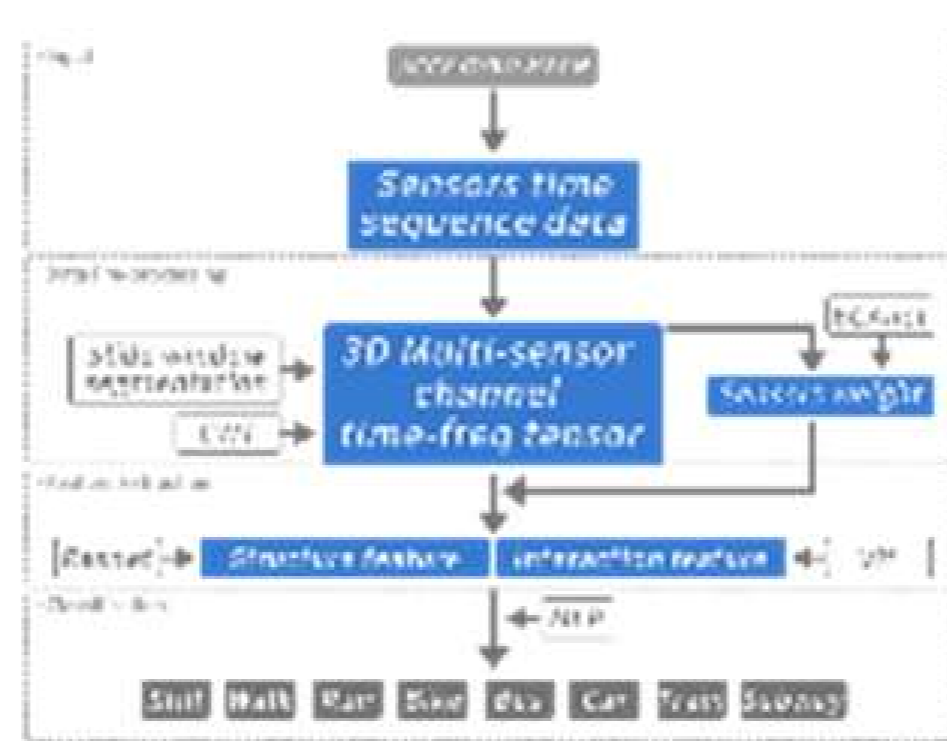
Position Estimation Framework using Smartphone
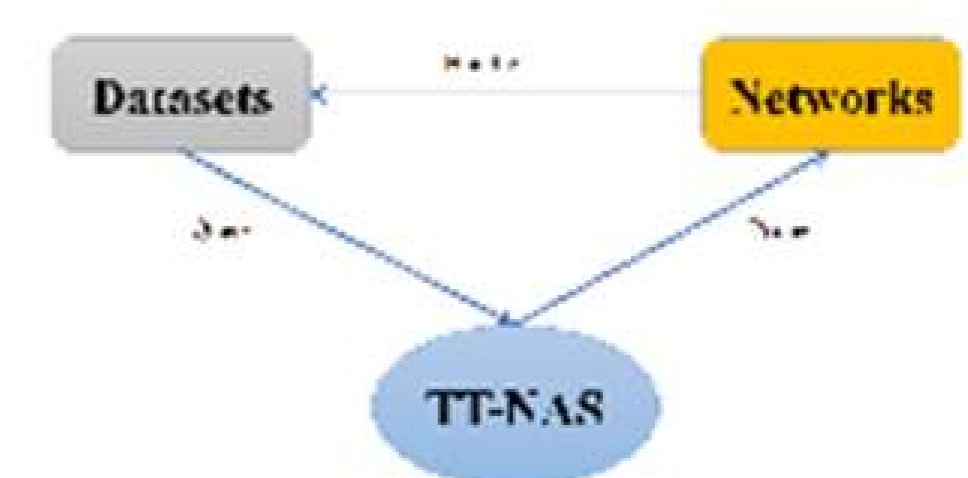via Image Retrieval

Deep Learning

Line Generation for Manga Drawing using
Generative Models

Efficient Training of CGANs
for Class Imbalanced Data

Neural Architecture Search

Institute of Industrial Science, The University of Tokyo