CSGI

Center for Socio-Global Informatics

[Cyber-Physical Systems based on Deep Understanding of Human Activities]

http://www.csgi.iis.u-tokyo.ac.jp

Director: Yoichi SATO   Vice Director: Masashi TOYODA

Center for Socio-Global Informatics aims to establish and advance the emerging field of socio-global informatics on the integration of the cyber and physical worlds based on deep understanding of human activities at various levels ranging from each individual to a society.   Period of installation: April 2013 ~ March 2023

KITSUREGAWA Lab.
Ew-503

- Database engineering
- High performance database engine
- Cyber-physical Services
- Ultra-large-scale Web archive system
- Cyber space analysis system
- Global environment information fusion system
- Reliable network control technologies for cloud computing

Huge-scale spatio-temporal visualization system on the display wall

TOYODA Lab.
Ew-503

- Web mining
- Web solutions
- Big data platform for mobility data analysis
- Large scale information visualization
- Advanced user interface

Visual analysis of information diffusion on Twitter

Visual analysis for assessing the risk of traffic accident

Yoshinaga Lab.
Ew-503

- Natural Language Processing
- Computational Linguistics
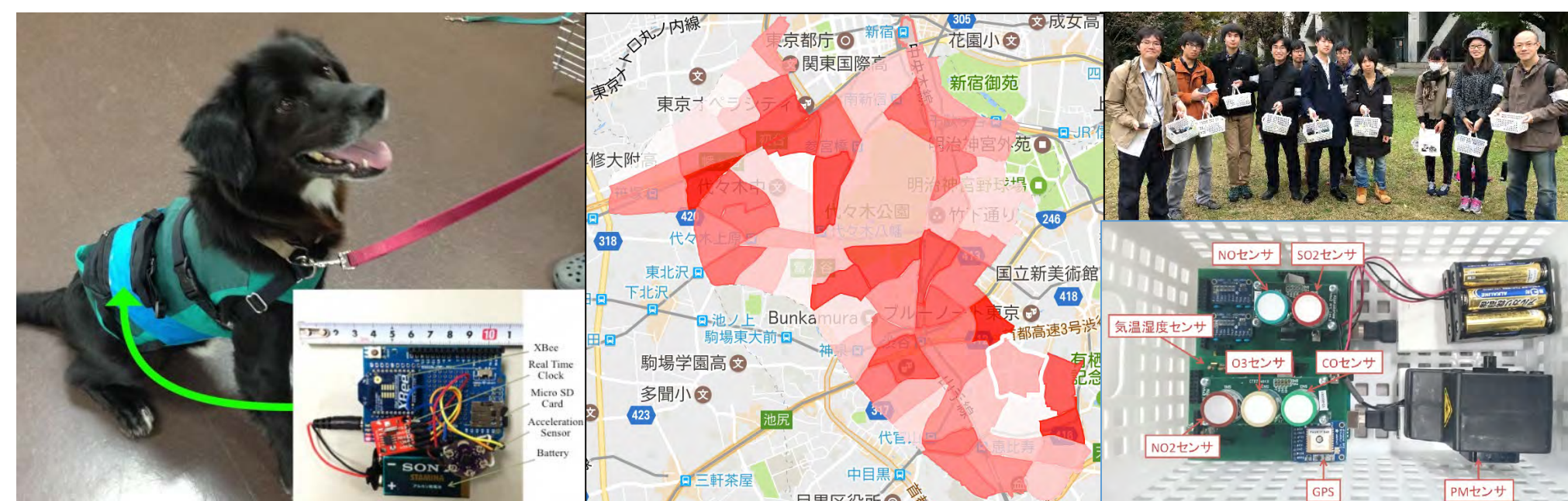- Efficient Real-World Text Analysis
- Machine Translation and Dialogue Sy

Public emotions on microblogs

SEZAKI Lab.
Ew-601

- Urban environment sensing
- Wireless sensor networks
- User mobility analysis
- Privacy preserving in sensing

Environmental monitoring for urban and natural environment

GODA Lab.
Ew-503

- Super-fast Database Systems
- Energy-efficient Database Systems
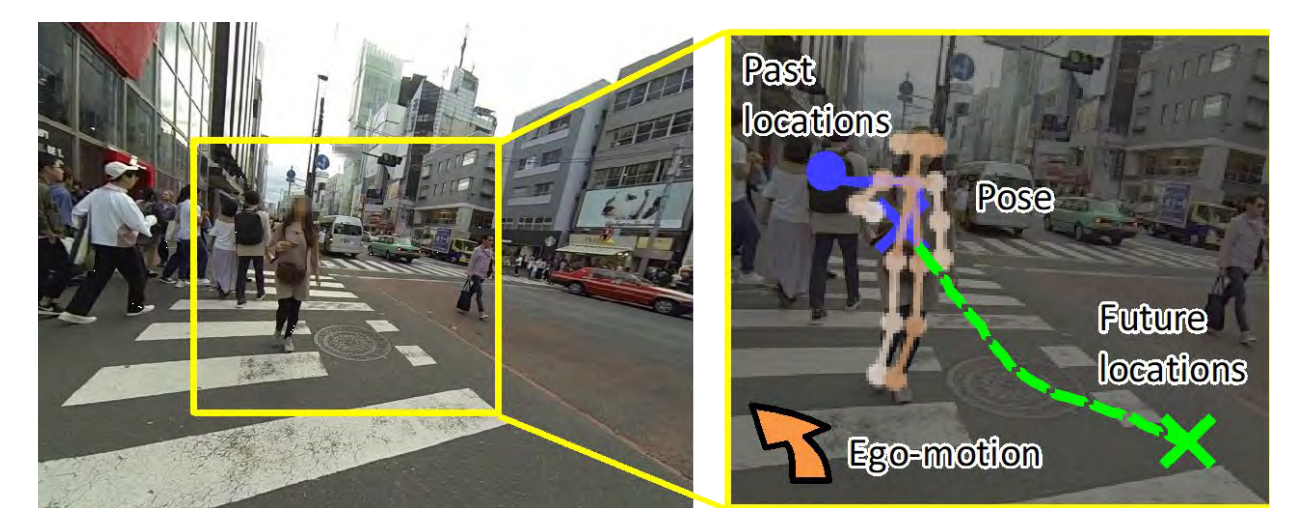- Intelligent Storage Systems

Prototype of Super-fast Database Engine

Y. SATO Lab.
Ee-402

- Computer vision
- Human activity recognition
- Gaze sensing and analysis
- Reflectance analysis and material recognition
- Face recognition under varying illumination

Predicting pedestrian's movements in first-person videos

KAMIJO Lab.
Ew-403

- GNSS Positioning
- 3D Map Construction
- Vehicle Self-localization
- Traffic Scene Understanding
- Intelligent Applications in Smartphones and Smart Glasses
- Customer Behavior Recognition
- V2V, V2P Communication
- Traffic Surveillance

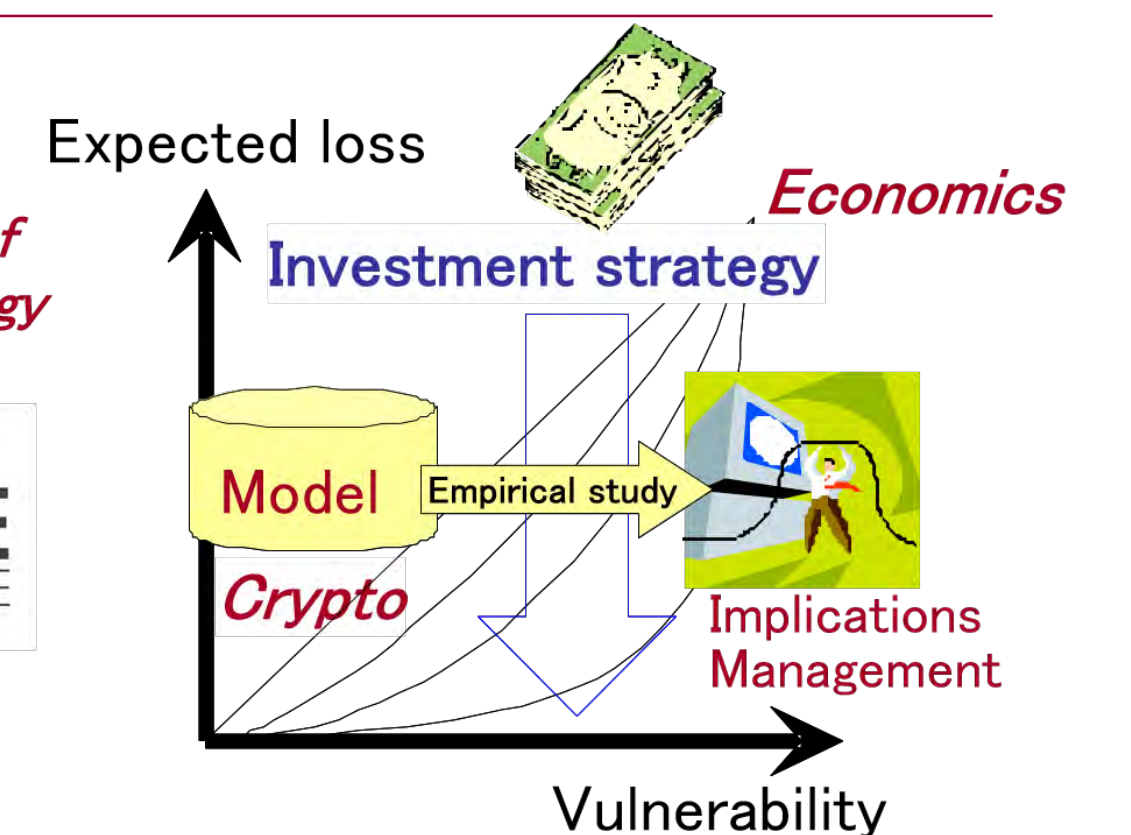Pedestrian navigation utilizing wearable devices

3D-GNSS positioning and 3D map construction

MATSUURA Lab.
Ew-401

- Cryptography
- Cybersecurity
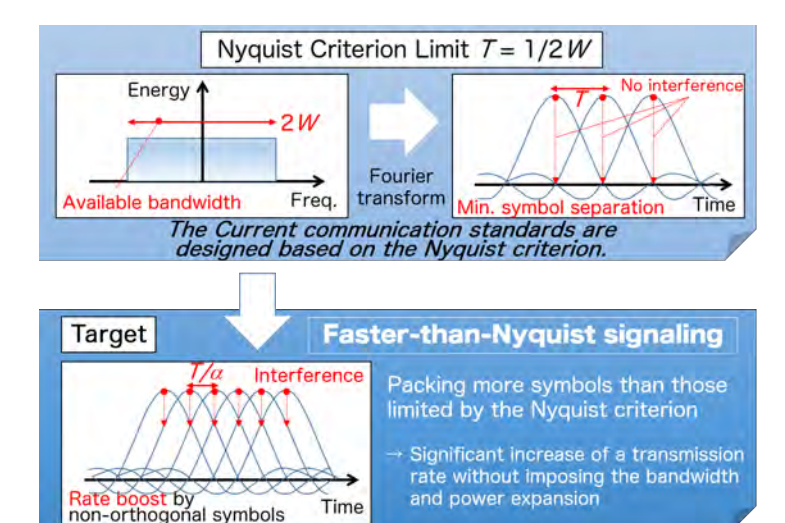- Anonymous communication system
- Economics of information security

SUGIURA Lab.
Ew-401

- Wireless Communication Networks
- Wireless Security
- Digital Signal Processing
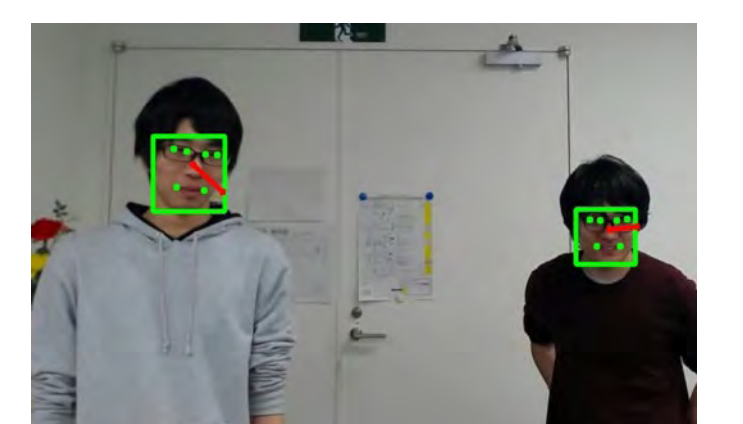- Distributed Storage

Faster-than-Nyquist signaling

SUGANO Lab.
Ew-406

- Gaze estimation and user understanding
- Computer vision and machine learning for HCI
- Interactive image and media understanding

Gaze estimation with machine learning

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