

Center for Socio-Global Informatics

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

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

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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 person to a society. Period of installation: April 2013 ~ March 2023

TOYODA Lab.

Ew-503

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

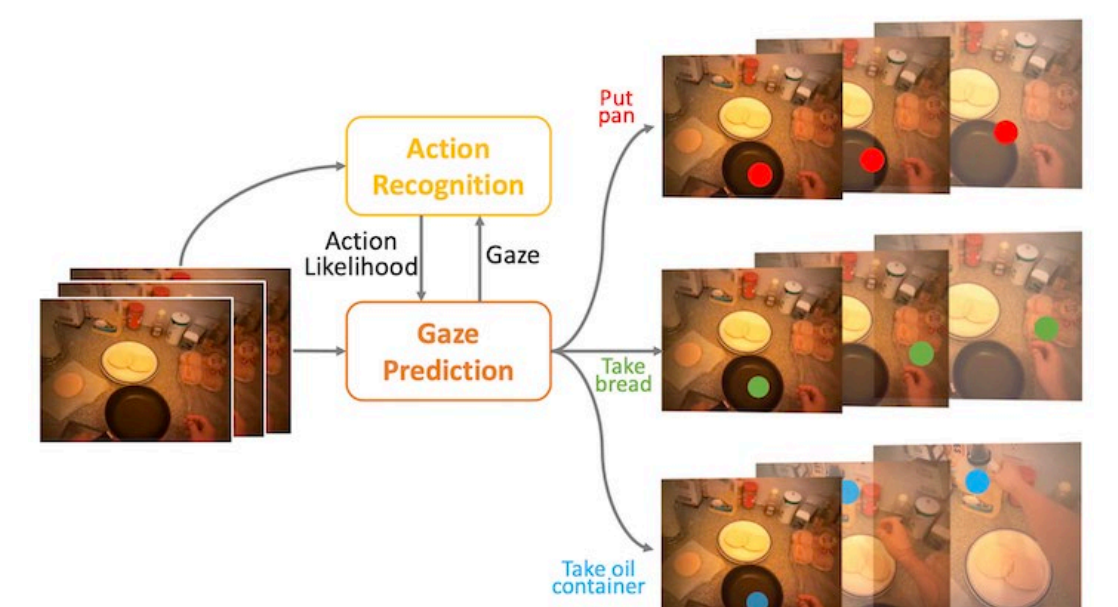


Visual analysis of information diffusion on Twitter Visual analysis for assessing the risk of traffic accident

Y. SATO Lab.

Ee-402

- Computer vision
- Human activity recognition
- Gaze sensing and analysis
- Reflectance analysis and material recognition



Understanding human attention and actions from first-person videos

Yoshinaga Lab.

Ew-503

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

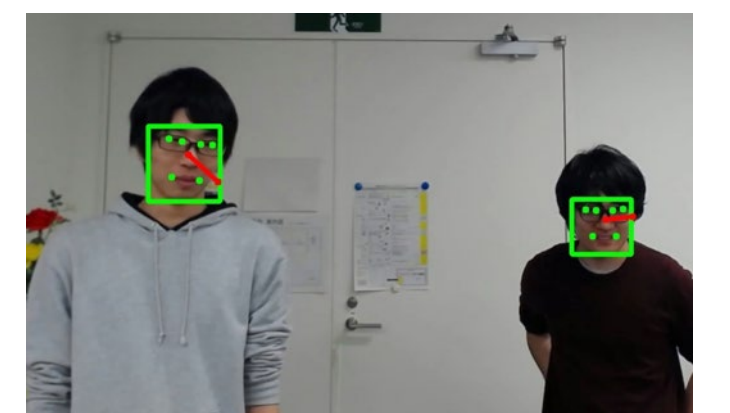
Real-Time Parsing / Invest-retweet	ツイート数	単語
2011/03/11 14:00 - 16:00	36927	1824 地震 750 余震 514 津波 120 映像 61 火車 51 水災 39 避難民 39
2011/03/11 16:00 - 18:00	31028	986 余震 873 地震 512 津波 142 映像 70 二次災害 53 水災 40 避難民 39
2011/03/11 18:00 - 20:00	20857	702 地震 578 余震 214 津波 93 映像 71 人災 59 二次災害 48 水災 39
2011/03/11 20:00 - 22:00	19288	816 余震 762 地震 243 津波 84 映像 68 映像 45 水災 38 映像 38
2011/03/11 22:00 - 00:00	26359	931 余震 682 地震 511 津波 450 外出 119 映像 75 水災 49 水災 41
2011/03/12 00:00 - 02:00	25726	1114 余震 470 地震 291 外出 262 津波 89 避難民 41 映像 40 映像 38
2011/03/12 02:00 - 04:00	10980	381 余震 211 地震 199 外出 171 外出 96 津波 90 映像 41 映像 38
2011/03/12 04:00 - 06:00	19261	485 映像 360 余震 338 地震 252 外出 73 緊急地震速報 66 津波 37 映像 38
2011/03/12 06:00 - 08:00	8313	190 余震 190 地震 114 映像 93 津波 62 映像 60 外出 38 緊急地震速報 38

Public emotions on microblogs

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

GODA Lab.

Ew-503

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

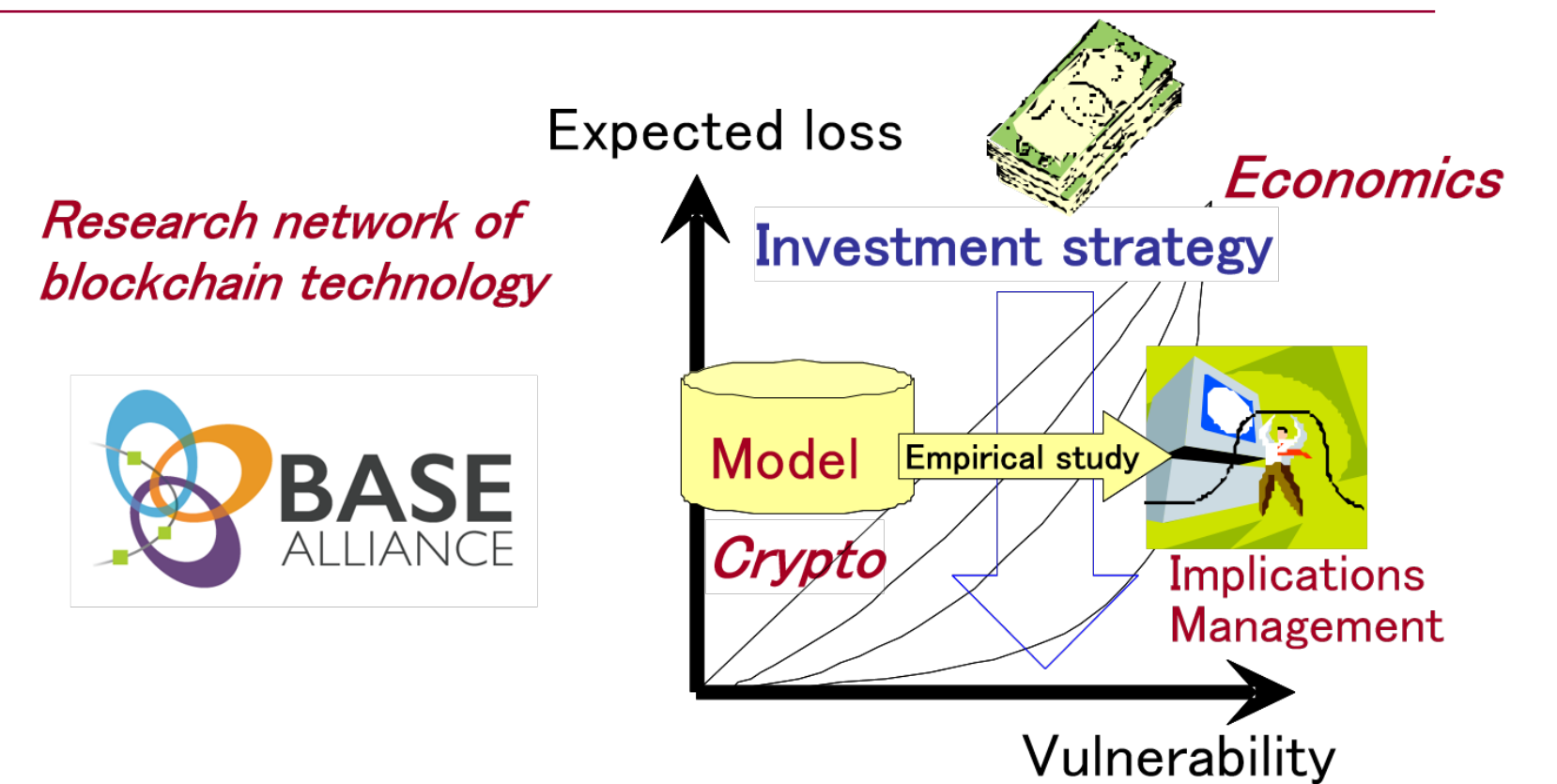


Prototype of Super-fast Database Engine

MATSUURA Lab.

Ew-401

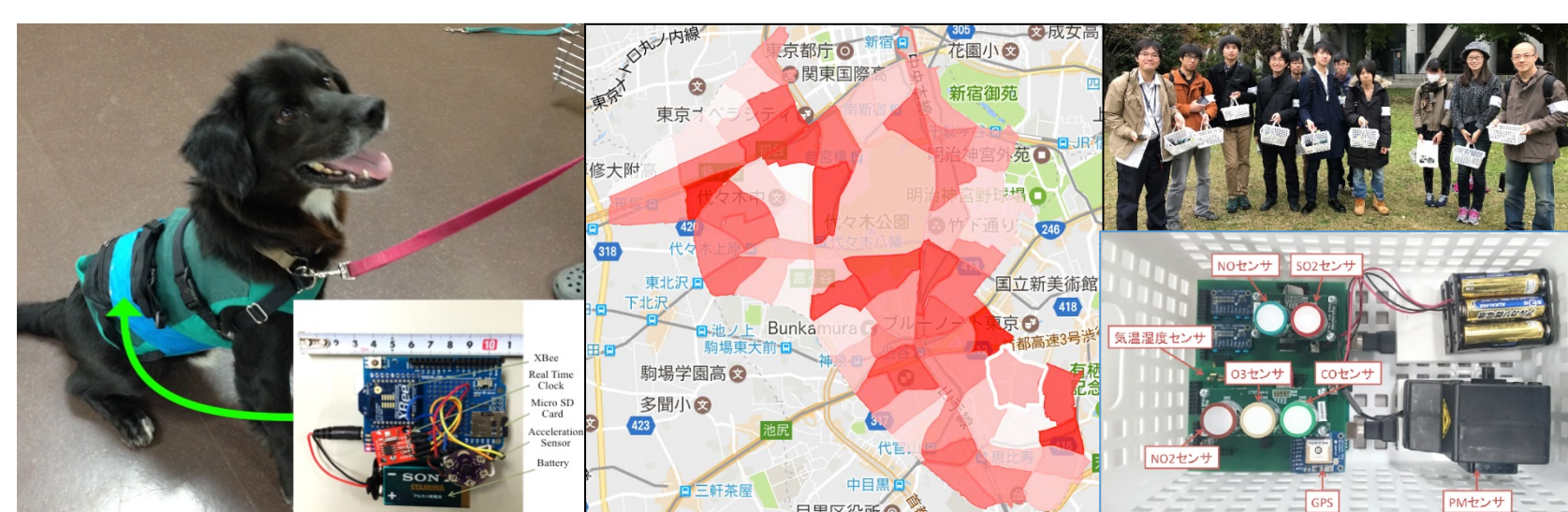
- Cryptography
- Cybersecurity
- Anonymous communication system
- Economics of information security



SEZAKI Lab.

Ew-601

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

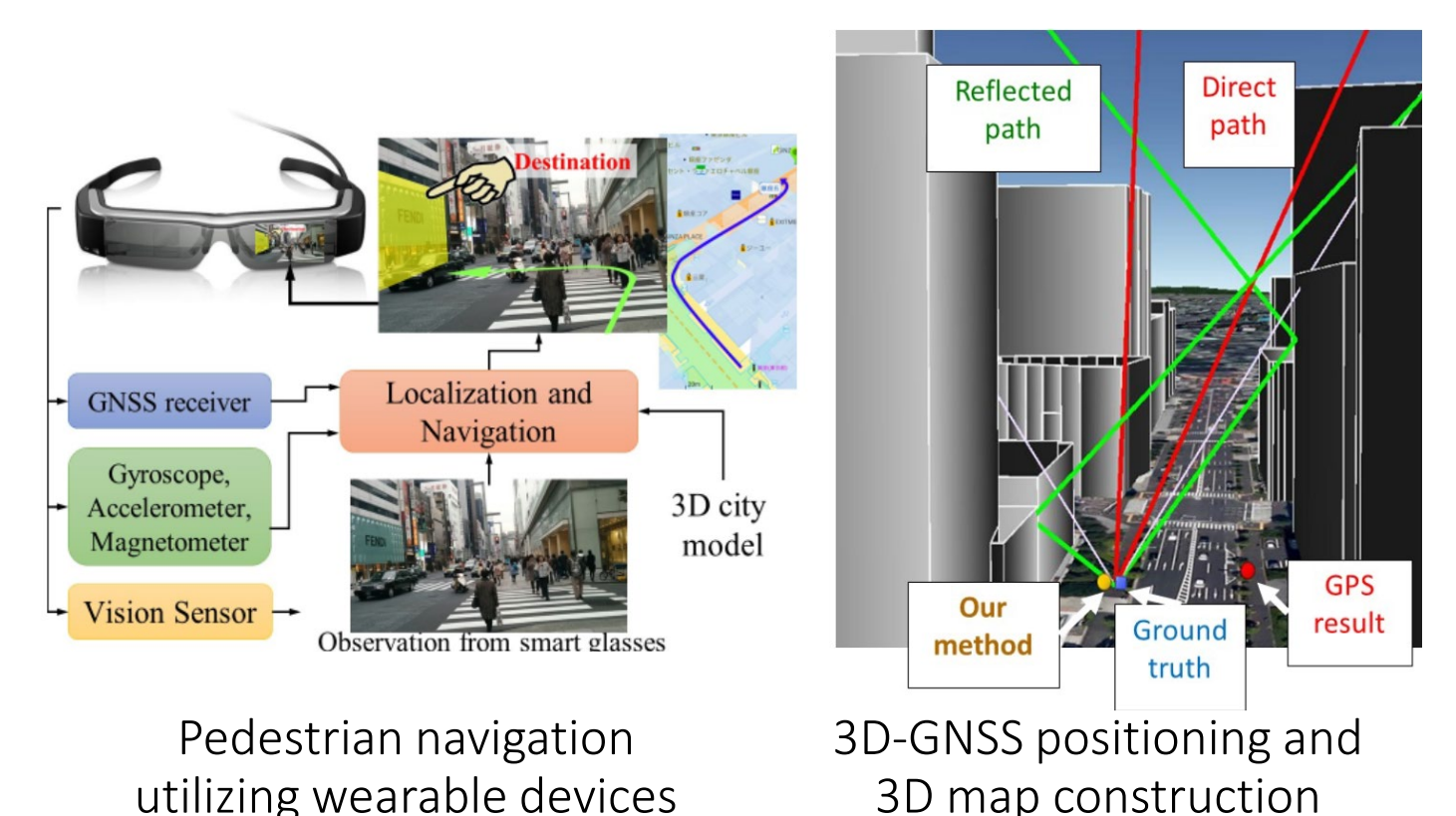


Environmental monitoring for urban and natural environment

KAMIJO Lab.

Ew-403

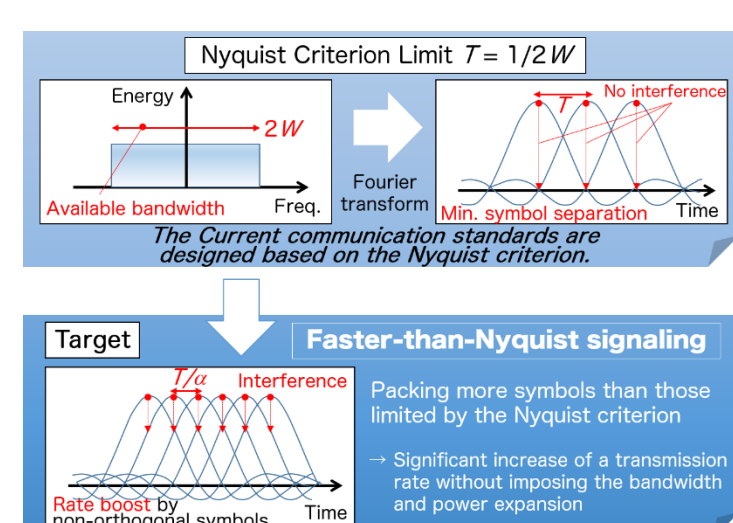
- GNSS Positioning
- 3D Map Construction
- Vehicle Self-localization
- Traffic Scene Understanding
- Intelligent Applications in Smartphones and Smart Glasses
- Customer Behavior Recognition
- V2V, V2P Communication
- Traffic Surveillance



SUGIURA Lab.

Ew-401

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



Faster-than-Nyquist signaling