



# CENTER FOR INFORMATION FUSION

## [ Cyber Information, Real World Information, and Information Fusion ]

Established on April 1, 2003, for a 10-year period

Director: KITSUREGAWA Masaru

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

The mission of this research center is to conduct basic research in pioneering the field of information fusion, i.e., cyber information fusion, real-world information fusion, and strategic information fusion. The Center will also focus on deploying the latest research results into various applications in our society.

### CYBER INFORMATION

## KITSUREGAWA Lab. Ew-503

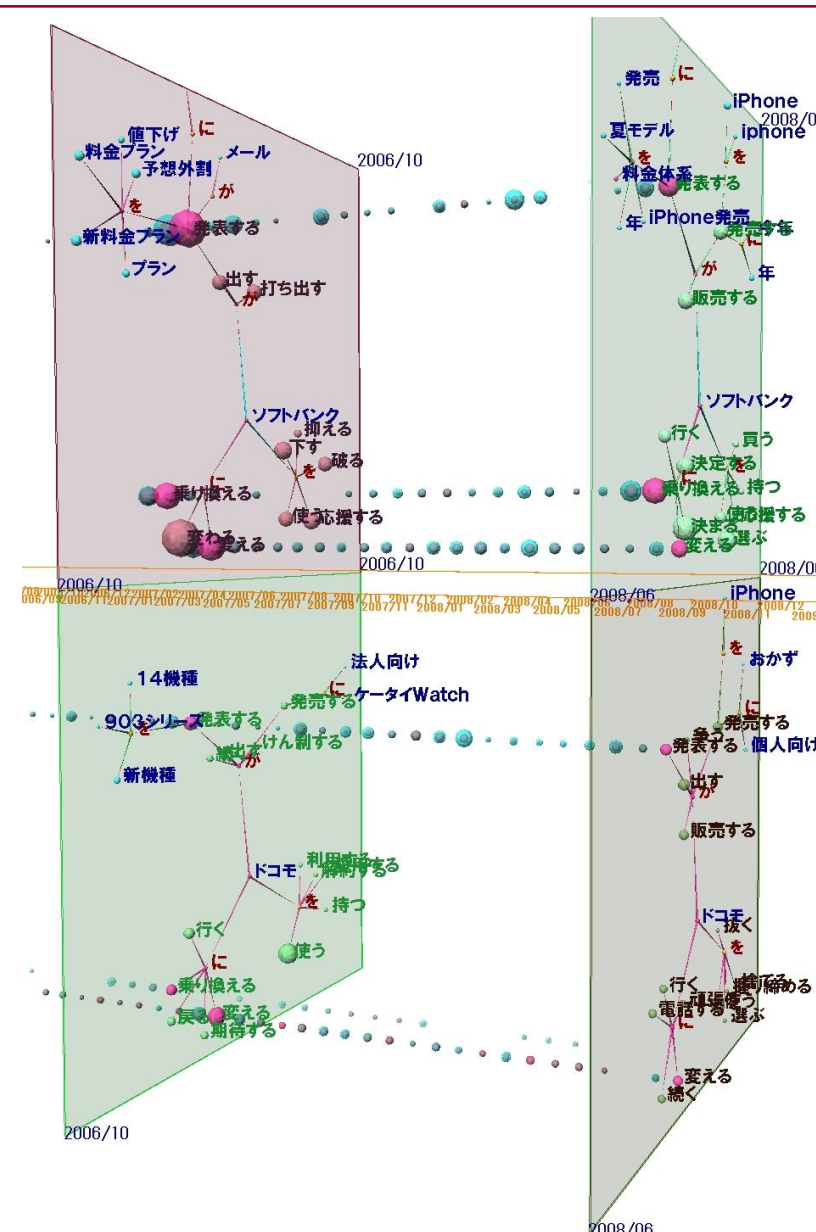
- Database engineering
- High performance database engine
- Cyber-physical Services
- Ultra-large-scale Web archive system
- Cyber space analysis system
- Global environment information fusion system
- Reliable network control technologies for cloud computing



The cyber map visualization system on the display wall

## TOYODA Lab. Ew-503

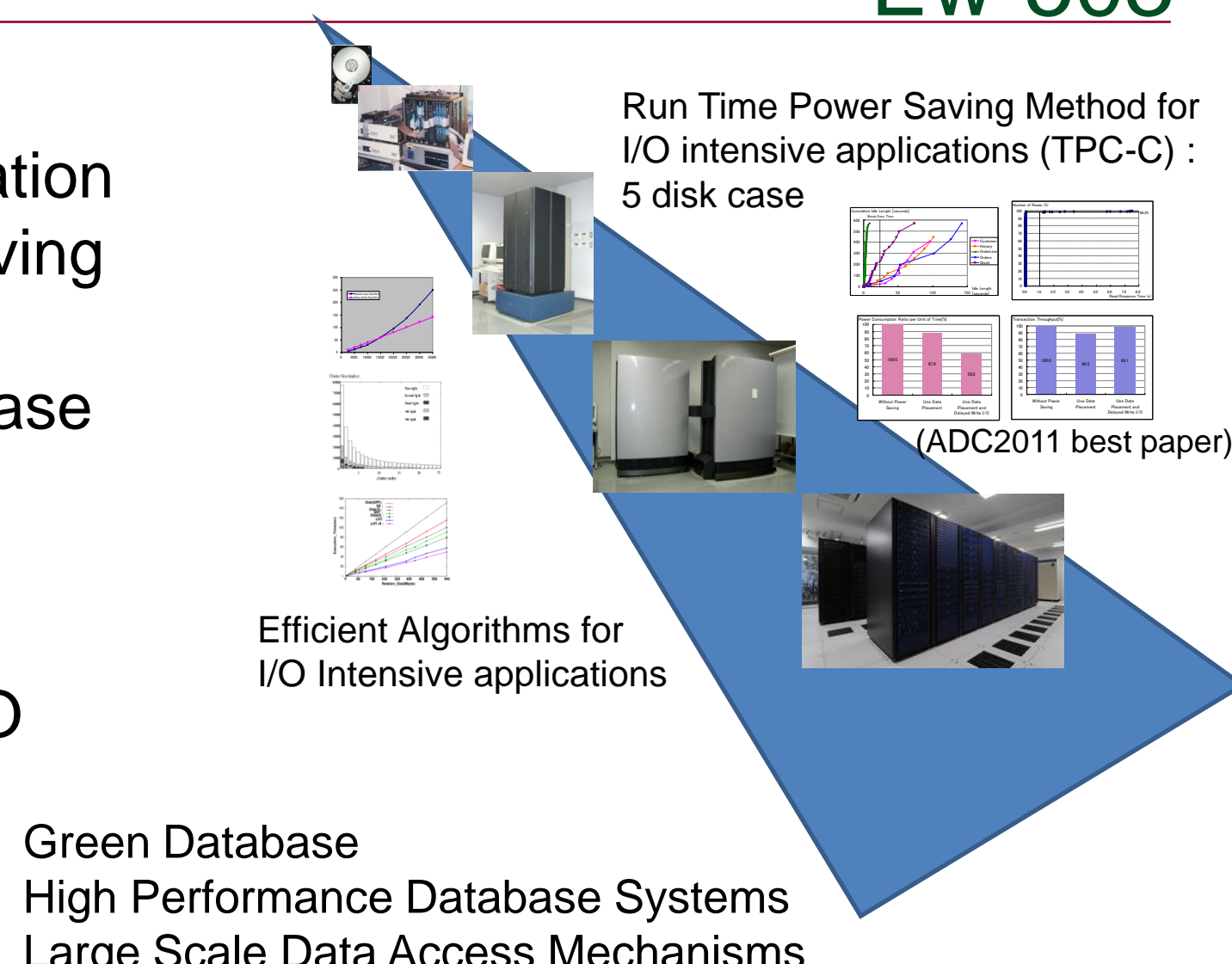
- Web mining
- Web solutions
- Large scale information visualization
- Advanced user interface



Visualization of changes in blog users' activities and interests

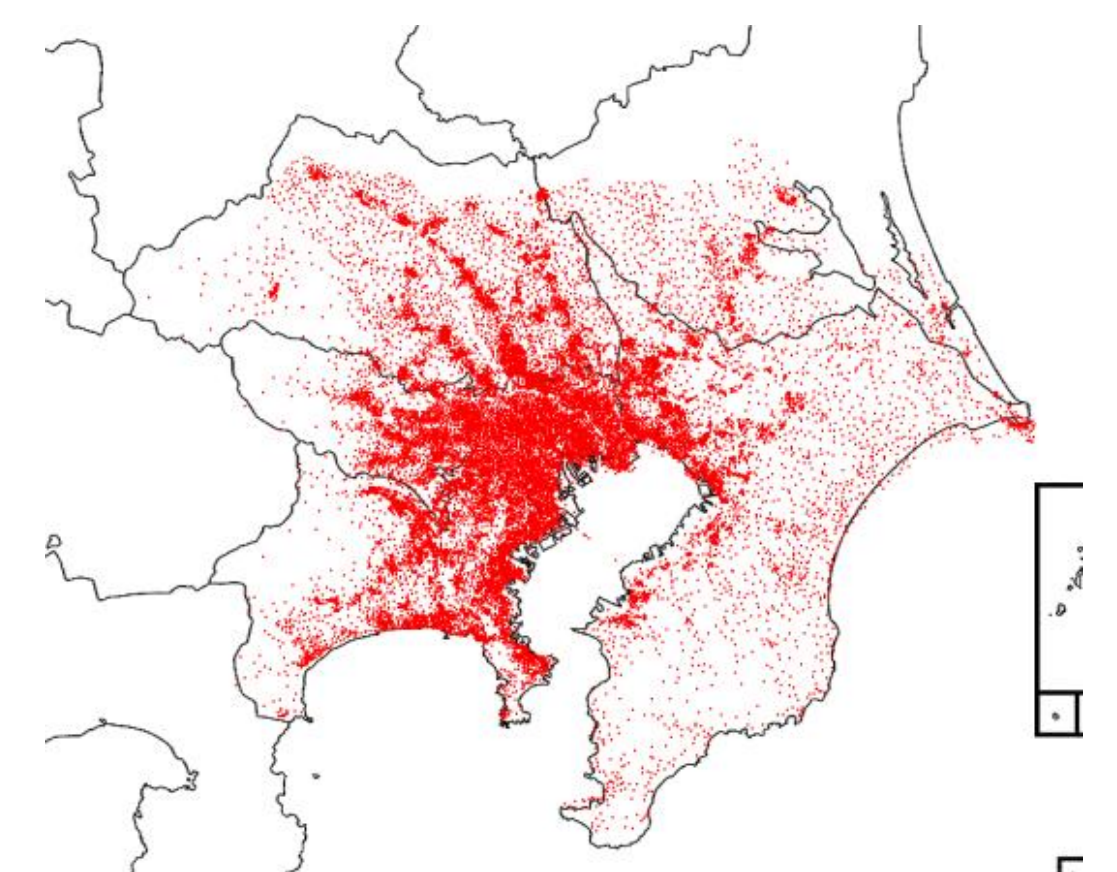
## NAKANO M Lab. Ew-503

- Green Database : application collaborative power saving methods
- High Performance Database Systems
- Large Scale Data Access Mechanisms
- Efficient Algorithms for I/O intensive applications



## SUZUKI H Lab. Ce-605

- Mathematical modeling of infectious diseases and information diffusion
- Mathematical modeling of neural information processing
- Multi-agent modeling
- Complex phenomena in hybrid dynamical systems

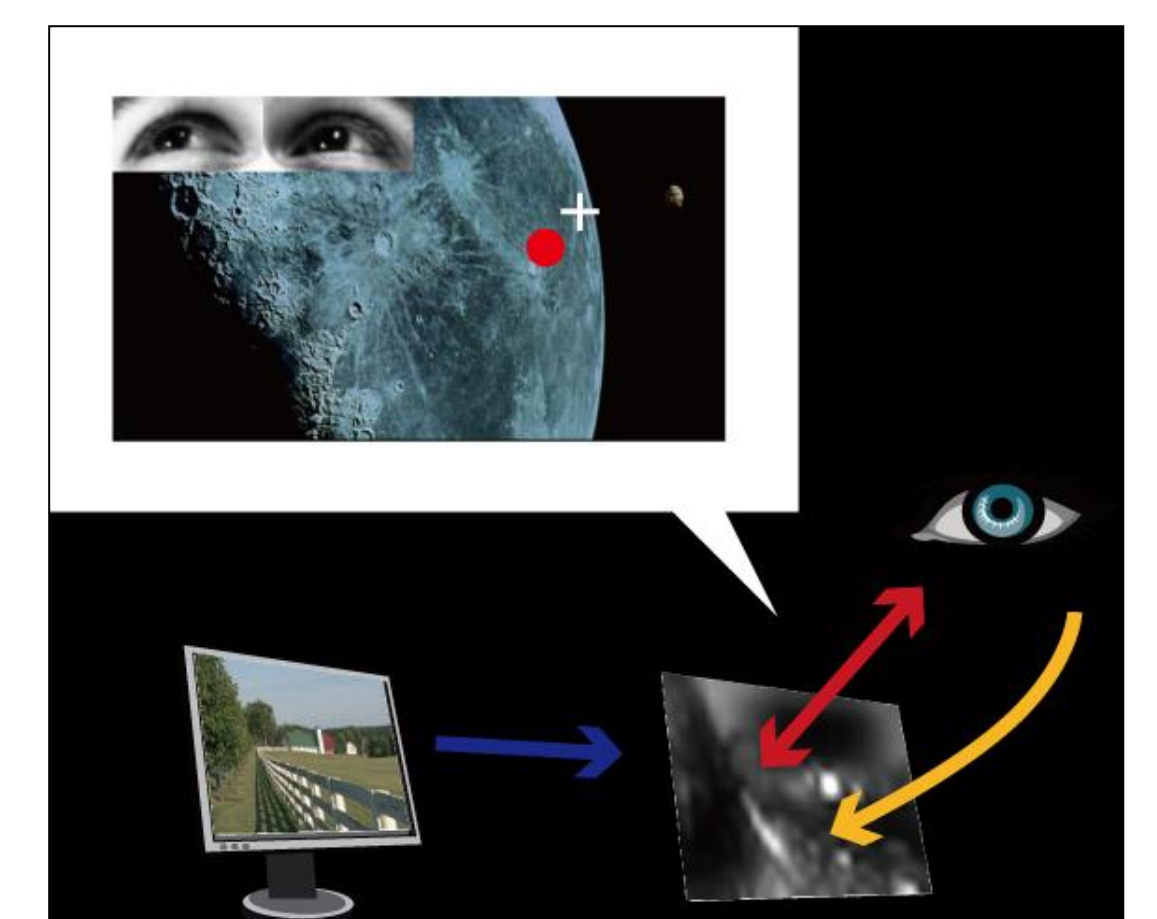


Numerical simulation of infectious diseases

### REAL WORLD INFORMATION

## SATO Y Lab. Ee-402

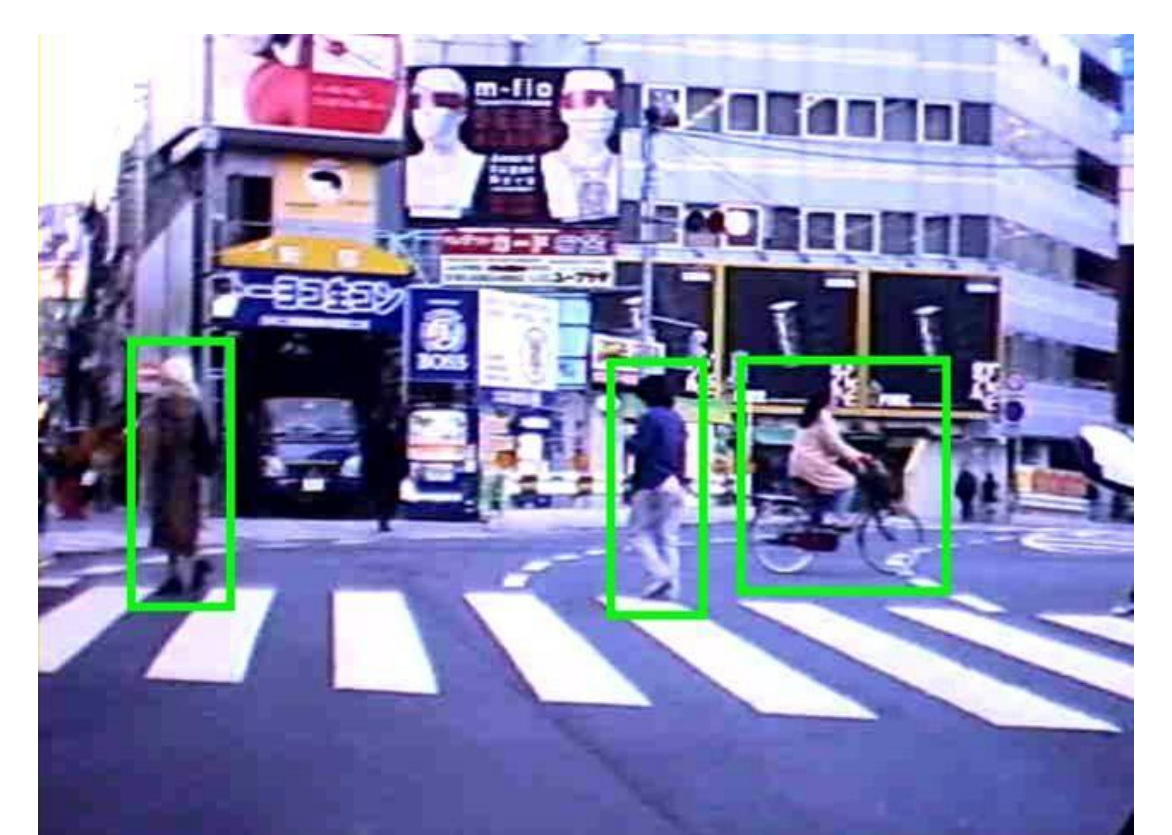
- Computer Vision
- Sensing and Understanding of Human Activities
- Gaze and Attention Estimation
- Reflectance Analysis and Material Recognition
- Face Recognition under Varying Illumination



Gaze estimation using visual saliency

## KAMIJO Lab. Ew-403

- Robust Object Tracking using the Spatio-Temporal MRF Model
- Real-time Detection of Abnormal Traffic Flow
- Technology for On-board Sensing
- Advanced Driver Assistance System
- Surveillance of pedestrian in Public Space



Pedestrian Detection and Tracking using On-board Monocular Camera