

4th IPS International Collaboration Symposium

17-19 November 2010

Graduate School of Information, Production and Systems, WASEDA University
2-7 Hibikino, Wakamatsu-Ku, Kitakyushu, Fukuoka, 808-0135, Japan

SCHEDULE

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17th Nov. (Wed)

9:10 *pick up at the hotel lobby*

----- Media Center 1F Tele-Lecture Room 1 (FAIS) ----

10:00 – 10:10 Opening Ceremony

Opening Address

Prof. Kotaro Hirasawa

Dean of Graduate School of Information, Production and Systems, Waseda University

Greeting from Our Special Guest

Mr. Kazuo Onoe

Senior Managing Director

Kitakyushu Foundation for the Advancement of Industry Science and Technology

----- Media Center 1F Tele-Lecture Room 1 (FAIS) ----

10:10 – 10:20 Guidance

Prof. Shigeru Fujimura (Waseda University, Japan)

----- Media Center 1F Tele-Lecture Room 1 (FAIS) ----

10:30 – 11:30 Invited Talk

Session Chair: Prof. Yasuaki Inoue (Waseda University, Japan)

The creative technique and design system for animation

---- new trends and recent progress

Prof. Lizhuang Ma (Shanghai Jiao Tong University, China)

----- Student Lobby (IPS) ----

12:00 – 13:30 Lunch

----- Lecture Room S101 (IPS) ----

13:30 – 14:30 C1: Collaboration Session

Support Vector Machine and EEG Signal Processing

Session Chair: Prof. Jinglu HU (Waseda University, Japan)

Local Linear Multi-SVM System with Composite Kernel for Classification

Benhui Chen and Jinglu Hu (Waseda University, Japan)

Overlapping Discriminative Common Spatial Pattern Method for Motor Imagery
Brain-Computer Interface

Gufei Sun and Jinglu Hu (Waseda University, Japan)

EEG Feature Extraction and Classification

Jizhong Shen (Zhejiang University, China)

Feature extraction and classification of four-class motor imagery EEG Data

Jinhe Shi, Jizhong Shen and Pan Wang (Zhejiang University, China)

----- Lecture Room S104 (IPS) ----

13:30 – 14:30 C2: Collaboration Session

Creation of a Chinese-Japanese Bilingual Resource for Machine Translation

Session Chair: Prof. Yves Lepage (Waseda University, Japan)

Introduction: data-oriented machine translation and the need for bilingual
Chinese-Japanese corpora

Yves Lepage (Waseda University, Japan)

Research and development of machine translation system at CASIA

Yu Zhou (Institute of Automation, Chinese Academy of Sciences, China)

Alignment in machine translation, translation guessing

Yves Lepage (Waseda University, Japan)

Fundamental research on NLP at CASIA

Chengqing Zong (Institute of Automation, Chinese Academy of Sciences, China)

A survey of existing Chinese-Japanese resources and methods for collecting
bilingual resources

Jing Sun (Waseda University, Japan)

----- Lecture Room S101 (IPS) ----

14:40 – 16:10 C3: Collaboration Session

Book Reading Robot and Image Processing Applications

Session Chair: Prof. Sei-ichiro Kamata (Waseda University, Japan)

An Overview of Book Reading Robot - Ninomiya-kun (二宮くん) -

Sei-ichiro Kamata (Waseda University, Japan)

An Overview of Book Reading Robot - JoyTon (福音) -

Qunfei Zhao (Shanghai Jiao Tong University, China)

The Structure and Key Techniques of an Emotional TTS System

Jie Zhu (Shanghai Jiao Tong University, China)

Realization of Novel Visualisation Techniques for Improved Environmental Awareness

Toby BRECKON (Cranfield University, UK)

----- Lecture Room S104 (IPS) ----

14:40 – 16:10 C4: Collaboration Session

Large Scale Process Simulation and Pipe Inspection Robot

Session Chair: Prof. Harutoshi Ogai (Waseda University, Japan)

Enterprise-Wide Optimization in Process Industry

Gang RONG (Zhejiang University, China)

Simulation of Blast Furnace based on Computational Fluid Dynamics

Donghan Li (Waseda University, Japan)

Structural Health Monitoring of Composites using Smart Sensing and Actuation

Anand Kumar (Indian Institute of Technology Kanpur, India)

Advanced Pipe Inspection Robot using Rotating Probe and Image Processing

Ryuta Oyabu (Waseda University, Japan)

----- Lecture Room S101 (IPS) ----

16:20 – 17:20 C5: Collaboration Session

Tackling energy generation and saving

Session Chair: Prof. Osamu Yoshie (Waseda University, Japan)

Study of Multi-Spectral Solar Photovoltaic System

Yuan Zhao, Ming-Yu Sheng, Er-Tao Hu, Yu-Xiang Zheng, and Liang-Yao Chen (Fudan Univ., China)

All-inclusive approach to equipment maintenance using digital pen and IC tags

Huiquan Zhang and Osamu Yoshie (Waseda University, Japan)

Towards energy diagnosis – Diagnosis for vast number of machines and its extension to energy loss prevention

Ning He, Xiaolei Sun and Osamu Yoshie (Waseda University, Japan)

A consideration on sensor network of demonstrative experiment in smart city project

JunO Song and Osamu Yoshie (Waseda University, Japan)

----- Lecture Room S104 (IPS) ----

16:20 – 17:20 C6: Collaboration Session

Low Power Analog Circuit Design Technology

Session Chair: Prof. Yasuaki Inoue (Waseda University, Japan)

Ultra-Low Power Analog Circuits for Energy Harvesting System Design

Zhangcai Huang and Yasuaki Inoue (Waseda University, Japan)

Improved All-CMOS temperature compensated current reference

Huang Shenzhuan and Zhou Feng (Fudan University, China)

----- Gallery and Student Computer Lab (IPS) ----

17:30 – 18:00 Preparation for Poster & Demonstration Session

Please bring your presentation posters.

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18th Nov. (Thu)

9:10 *pick up at the hotel lobby*

----- Media Center 1F Tele-Lecture Room 1 (FAIS) ----

10:00 – 11:00 Tour of Kitakyushu Science and Research Park
Training & Fabrication of IC/MEMS, Energy Center

===== Only for students of Waseda Saga High School =====

----- Computer Lab 2 N159 (IPS) ----

10:00 – 10:10 Welcome Ceremony for Waseda Saga High School
Opening Address

Prof. Kotaro Hirasawa (Waseda University, Japan)

10:10 – 10:30 Introduction of IPS

Prof. Osamu Yoshie (Waseda University, Japan)

----- Gallery and Student Computer Lab (IPS) ----

10:30 – 11:00 Preparation for Poster & Demonstration Session

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----- Computer Lab 2 N159 (IPS) ----

11:00 – 12:00 Special Session of Waseda Saga High School
The Introduction of Waseda Saga High School Science Club

Session Chair: Prof. Tomohiro Murata (Waseda University, Japan)

Overview (Waseda University, Waseda Saga High School)

Motoki Ishiguro (Waseda Saga Senior High School, Japan)

Introduction of Science Club (Biology, 3D, LEGO, Magazine, Juggling, Origami,
Physics Theory and Experiments)

Hideki Shimabayashi (Waseda Saga High School, Japan)

Biology

Haruka Koyama (Waseda Saga High School, Japan)

3D

Hiroki Nagai (Waseda Saga High School, Japan)

LEGO

Kazufumi Sakaguchi (Waseda Saga High School, Japan)

Magazine

Tamao Oishi (Waseda Saga High School, Japan)

----- Student Lobby (IPS) ----

12:00 – 13:00 Lunch

----- Gallery and Student Computer Lab (IPS) ----

13:00 – 17:00 Poster & Demonstration Session

Session Chair: Prof. Shigeru Fujimura (Waseda University, Japan)

----- Student Lobby (IPS) ----

14:00 – 16:00 Tea Party

13:00 – 17:00 Performance (Juggling, Origami, etc.)

----- Event Hall of Conference Center (FAIS) ----

18:00 – 20:00 *Banquet*

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19th Nov. (Fri)

8:50 pick up at the front of IPS
(for IPS faculty members and students)

9:25 pick up at the hotel lobby (for visitors)

10:30 – 12:00 Tour of Nissan Kyushu Plant

12:00 break up and go to Hakata, Fukuoka (for visitors)
come back to IPS (for IPS members)

13:00 – Free time in Hakata, Fukuoka

Presentations of Poster & Demonstration Session

P- 01: LEGO

Kazufumi Sakaguchi and Ryoma Kobayashi (Waseda Saga High School, Japan)

P- 02: Waseda and our club

Motoki Ishiguro and Hideki Shimabayashi (Waseda Saga High School, Japan)

P- 03: Biology and 3D

Haruka Koyama and Hiroki Nagai (Waseda Saga High School, Japan)

P- 04: Magazine

Tamao Oishi (Waseda Saga High School, Japan)

P- 05: Proposal of a Methodology to Build a Chinese-Japanese Resource

Jing Sun and Yves Lepage (Lepage Lab., Waseda University, Japan)

P- 06: Statistical Machine Translation Experiments

Using Four Different Aligners

Juan LUO and Yves Lepage (Lepage Lab., Waseda University, Japan)

P- 07: A Study of Proportional Analogies between Chunks

in Different Languages

Kota Takeya and Yves Lepage (Lepage Lab., Waseda University, Japan)

P- 08: Towards energy diagnosis – Diagnosis for vast number of machines and its extension to energy loss prevention

He Ning, Sun Xiaolei and Osamu Yoshie (Yoshie Lab., Waseda University, Japan)

P- 09: All-inclusive approach to equipment maintenance

using digital pen and IC tags

Huiquan Zhang and Osamu Yoshie (Yoshie Lab., Waseda University, Japan)

P- 10: Abnormal Detection of Processes Based on Improved Rough Set Value Reduction Algorithm and System Calls

Feng Liu (Nanjing University, China)

P- 11: A Dynamic Test Cluster Sampling Strategy by Leveraging Execution Spectra Information

Shali Yan, Zhenyu Chen, Zhihong Zhao and Kun Wu (Nanjing University, China)

P- 12: Local Linear Multi-SVM System with Composite Kernel for Classification

Benhui Chen and Jinglu Hu (Furutuki Lab., Waseda University, Japan)

P- 13: Feature extraction and classification of four-class motor imagery EEG data

Jinhe Shi, Jizhong Sheng and Pan Wang (Zhejiang University, China)

- P- 14: Robust asset selection using Genetic Network Programming Victor Parque, Shingo Mabu and Kotaro Hirasawa (Hirasawa Lab., Waseda University, Japan)
- P- 15: A Bidding Strategy for Auction Mechanisms based on Genetic Network Programming (GNP)
Chuan Yue, Donggeng Yu, Shingo Mabu and Kotaro Hirasawa (Hirasawa Lab., Waseda University, Japan)
- P- 16: Adaptive Mutation in SARSA Learning of Genetic Network Programming with Individual Reconstruction
Fengming Ye (Hirasawa Lab., Waseda University, Japan)
- P- 17: Study on Online Monitoring and Remote Diagnosis Technique of the Key Components of Shield Machine
Jiong Zhao, Wei Wang, Sheng Zheng (Tongji University, China)
- P- 18: The City Lights Remote Management System
Chong Zhou (Tongji University, China)
- P- 19: Virtual Ice Lake for Rescue Application
Carlos Madrazo, Takeshi Tsuchiya, Hiroaki Sawano and Keiichi Koyanagi (Koyanagi Lab., Waseda University and AISIN AW.CO. LTD., Japan)
- P- 20: Research and Implementation of the Embeddable Emotion Speech Synthesis system with Auto-learning model
Xulei Bao and Jie Zhu (Shanghai Jiao Tong University, China)
- P- 21: 3D Reconstruction from a Single Image for a Chinese Talking Face
Ning Liu, Ning Fang and Seiichiro Kamata (Shanghai Jiao Tong University, China and Waseda University, Japan)
- P- 22: Two Modality-Based Bi-Finger Vein Verification System
Zhi-chao Li, Dong-Mei Sun, Di Liu, Siu-Yeung Cho (Beijing Jiaotong University, China and Nanyang University of Technology, Singapore)
- P- 23: Structural Health Monitoring of Laminated Composite Plate
Anand Kumar (Indian Institute of Technology Kanpur, India)
- P- 24:
Kailiang Tong (Zhejiang University, China)
- P- 25: The Health Monitoring System based on Distributed for WSN used in Bridge Diagnosis
Haitao Xiao, Tansheng Li, Harutoshi Ogai, Xiaohong Zou, Takenari Otawa, Shinya Umeda and Takunori Tsuji (Ogai Lab., Waseda University and Logical Product Corporation, Japan)

- P- 26: Design of Two-degrees-of-freedom Control System for Platooning
Ryo Takaki and Harutoshi Ogai (Ogai Lab., Waseda University, Japan)
- P- 27: Document Layout Analysis and Reading Order Determination
for a Reading Robot
*Yucun Pan, Qunfei Zhao and Seiichiro Kamata
(Shanghai Jiao Tong University, China and Waseda University, Japan)*
- P- 28: Image Description With 1D Local Pattern By Multi-Scans:
An Application to Face Recognition
Wei Zhou and Seiichiro Kamata (Kamata Lab., Waseda University, Japan)
- P- 29: Demonstration of Book Reading Robot -Ninomiya-kun-
Jian Zhang (Kamata Lab., Waseda University, Japan)
- P- 30: 3D Object Matching Based on Spherical HILBERT Scanning
Can Tong and Seiichiro Kamata (Kamata Lab., Waseda University, Japan)
- P- 31: Simulation of Blast Furnace Based on Computational Fluid Dynamics
Donghan Li and Harutoshi Ogai (Ogai Lab., Waseda University, Japan)
- P- 32: Advanced Pipe Inspection Robot using Rotating Probe
and Image Processing
Ryuta Oyabu and Harutoshi Ogai (Ogai Lab., Waseda University, Japan)
- P- 33:
Xinxin Fan (Dalian University of Technology, China)
- P- 34:
Tao Huang (Dalian University of Technology, China)
- P- 35: Risk Assessment for Card-style Identity Management
Xiaochen Ding (Iwaihara Lab., Waseda University, Japan)
- P- 36: Realtime Support Rate Estimation for Microblogging based on Social
Sensors
Jun Huang (Iwaihara Lab., Waseda University, Japan)
- P- 37: Efficient Algorithms for Stereo Vision
Lin Chen and Lizhuang Ma (Shanghai Jiao Tong University China)
- P- 38: Nanocomposites Insulator Materials for Device Packaging
Tomonori Iizuka and Kohei Tatsumi (Tatsumi Lab., Waseda University, Japan)
- P- 39: Multiobjective Process Planning and Scheduling Using Improved
Vector Evaluated Genetic Algorithm with Archive
Wenqiang Zhang and Shigeru Fujimura (Fujimura Lab., Waseda University, Japan)
- P- 40: Cooperative Autonomous Driving of Intelligent Vehicles
Using Magnetic Guidance

- Wei Guo, Ming Yang and Xinrong Peng (Shanghai Jiao Tong University, China)*
- P- 41: Estimation of corrosion rates at external corrosion of pipes under insulation
Sunghye Moon and Shigeyuki Tateno (Tateno Lab., Waseda University, Japan)
- P- 42: Development of PC-BTO system equipped with automatic selection of PC components
Vitayaphibul Jirada, Lee Michael and Shigeyuki Tateno (Tateno Lab., Waseda University, Japan)
- P- 43: A Clinical Decision Support System for Metabolic Syndrome
Shan Nan, Xudong Lu and Huilong Duan (Zhejiang University, China)
- P- 44: Multi-objective job shop scheduling with uncertain processing time and machine available constraint based on hybrid optimization approach
Jing Tian and Tomohiro Murata (Murata Lab., Waseda University, Japan)
- P- 45: Redundancy optimization for a Dam Control System in Integrated Uncertainty
Melo Cisneros Haydee Rocio, Shuming Wang and Junzo Watada (Watada Lab., Waseda University, Japan)
- P- 46: Blur restoration for a spherical single lens system of cell phone camera
Yupeng Zhang, Ikumi Minema and Toshitsugu Ueda (Ueda Lab., Waseda University, Japan)
- P- 47: Hydrogen Measurements by Quartz Sensor with Platinum Thin Film Electrodes
Hiroshi Oigawa and Toshitsugu Ueda (Ueda Lab., Waseda University, Japan)
- P- 48: The Study on Tribological Properties of ECR-Sputtering Carbon Films
Tianxiao Cai, Dongfeng Diao, Yingjie Xie and Xue Fan (Xi'an Jiaotong University, China)
- P- 49: Preparation of Nano Holes with ECR-Al Film on Silicon Substrate
Lei Yang, Dongfeng Diao and Xue Fan (Xi'an Jiaotong University, China)
- P- 50: Load Forecasting Method by RBFNN with SVM Model
Jiliang Xue and Junzo Watada (Watada Lab., Waseda University, Japan)
- P- 51: Diagonal Recurrent Neural Network based Control for MIMO system and Power Generation with High-order and Nonlinearity
Xu Fu and Hee-Hyol Lee (Lee Lab., Waseda University, Japan)
- P- 52: Effect of EHL Film Thickness Distribution on the Initial Running-in under Mixed Lubricating Condition

- Tianhao Hou and Susumu Matsumoto (Matsumoto Lab., Waseda University, Japan)*
- P- 53: A Non-iterative Effective Capacitance Model for CMOS Gate
DelaComputing
*Minglu Jiang, Qiang Li, Zhangcai Huang and Yasuaki Inoue
(Inoue Lab., Waseda University, Japan)*
- P- 54: High PSRR LDO with New forward Structure
Shengzhuan Huang (Fudan University, China)
- P- 55: Hardware evaluation system for ANN activation function using LUT
*Changjiao Wu, Tianyi Li, Syahrulanuar Ngah, Yuji Tanabe and Takaaki Baba
(Baba Lab., Waseda University, Japan)*
- P- 56: Acceleration of SAT-based Solver using GPGPU Techniques
Li Zhang and Shinji Kimura (Kimura Lab., Waseda University, Japan)
- P- 57: Memory effect of metal-oxide-silicon capacitors with self-assembly
double-layer Au nanocrystals embedded in atomic-layer-deposited HfO₂
dielectric
*Yue Huang, Hongyan Gou, Qingqing Sun, Shijin Ding, Wei Zhang and Shili Zhang
(Fudan University, China and Royal Institute of Technology, Sweden)*
- P- 58: Atomic layer deposited oxide films for resistive switching memory
application
Lin Chen, Qingqing Sun and David Wei Zhang (Fudan University, China)
- P- 59: A Multi-layer Routing Method for Parallel Isometric Wires
Ran Zhang and Takahiro Watanabe (Watanabe Lab., Waseda University, Japan)
- P- 60: A New Power-Efficient Instruction Fetch Mechanism
Yingtao Hu and Takahiro Watanabe (Watanabe Lab., Waseda University, Japan)
- P- 61: An Optical Microphone Array based on Time Domain Multiplexing
using Optical Fiber Delay
Dakang Ma, C. Pan, X.H. Sun (Southeast University, China)
- P- 62: Raster Scanning Realization for Electrothermal Bimorph
Microactuator
Kaili Liu, Yongming Tang, Huikai Xie and Jian Zhang (Southeast University, China)
- P- 63: A 160MHz 4-bit Pipeline Multiplier Using Charge Recovery Logic
Technology
*Yimeng Zhang, Leona Okamura, Nan Wang, Tsutomu Yoshihara
(Yoshihara Lab., Waseda University, Japan)*
- P- 64: Design and Optimization of Hybrid Decoupling Scheme for Charge
Pump Circuit in Non-volatile Memory Application

Mengshu Huang, Leona Okamura, Tsutomu Yoshihara

(Yoshihara Lab., Waseda University, Japan)

P- 65: A MOEMS acceleration sensor based on interferometric detection

Shuangshuang Zhao, Changlun Hou, Jian Bai and Guoguang Yang

(Zhejiang University, China)

P- 66: Low Phase Noise and Wide Tuning Range Oscillator Ics

Yusuke Takigawa, Xuewen Zhu and Toshihiko Yoshimasu

(Yoshimasu Lab., Waseda University and Mitsubishi Electric Corporation, Japan)

P- 67: Integrating Voltage Assignment and Voltage-Island-Driven

Floorplanning for Low-Power System-on-Chip Design

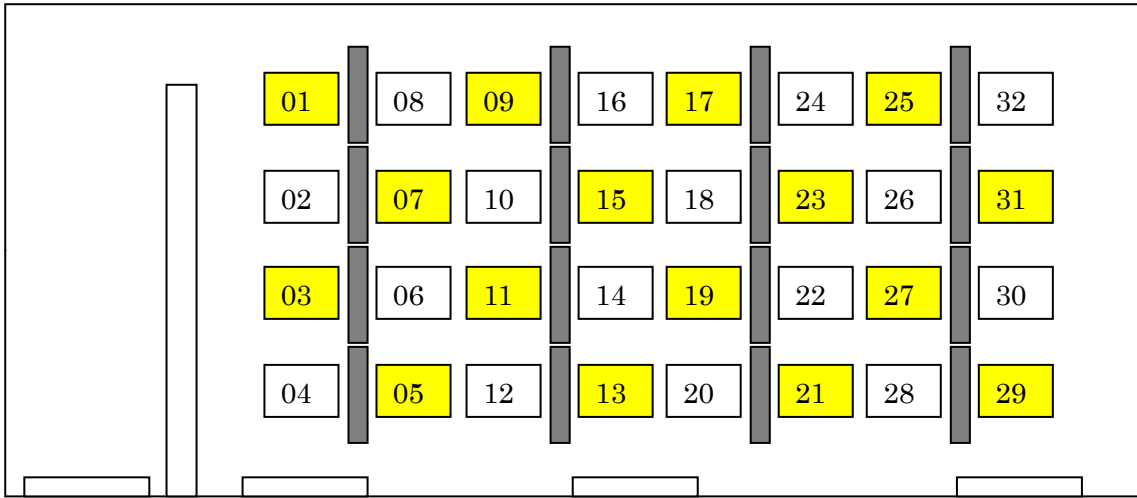
Xiaolin Zhang (Yoshimura Lab., Waseda University, Japan)

P- 68: Contents Analysis Based Coarse to Fine Adaptive Interpolation Filter
for High Efficiency Video Coding

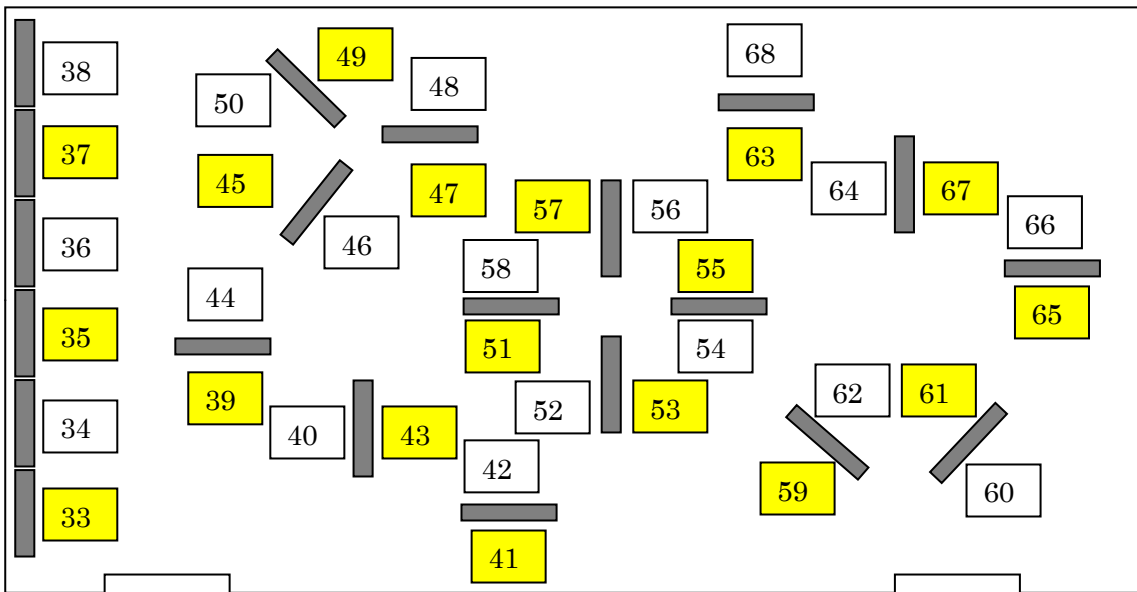
Jia Su, Shinichi Sakaida and Takeshi Ikenaga

(Ikenaga Lab., Waseda University and NHK, Japan)

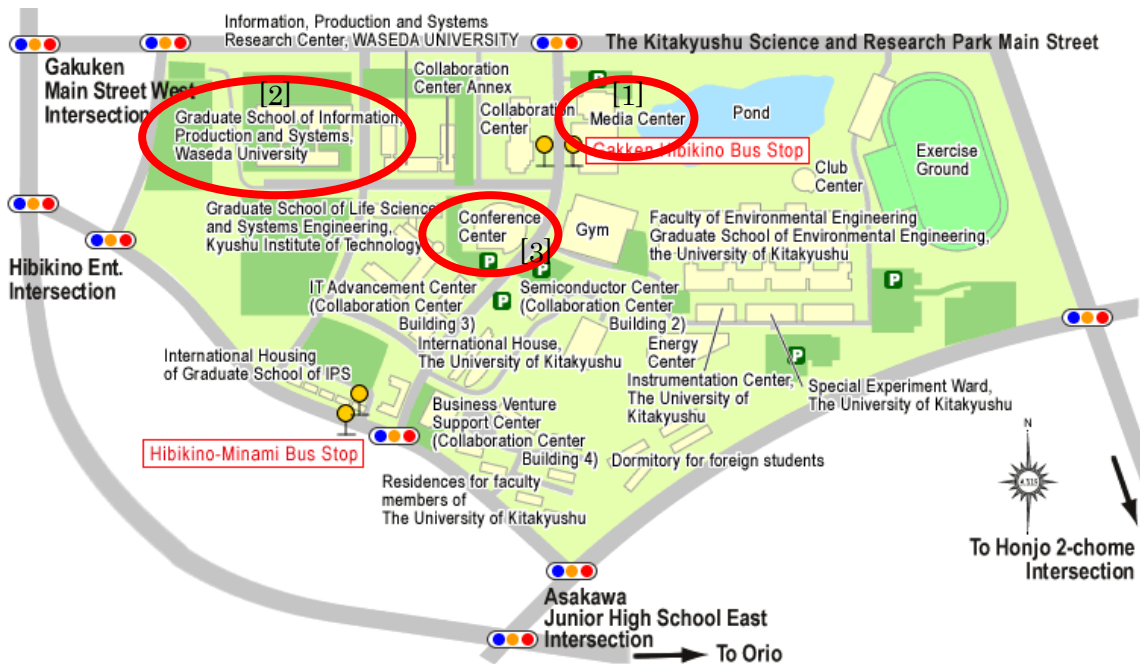
Booth Arrangement (Gallery and Student Computer Lab.)



Gallery



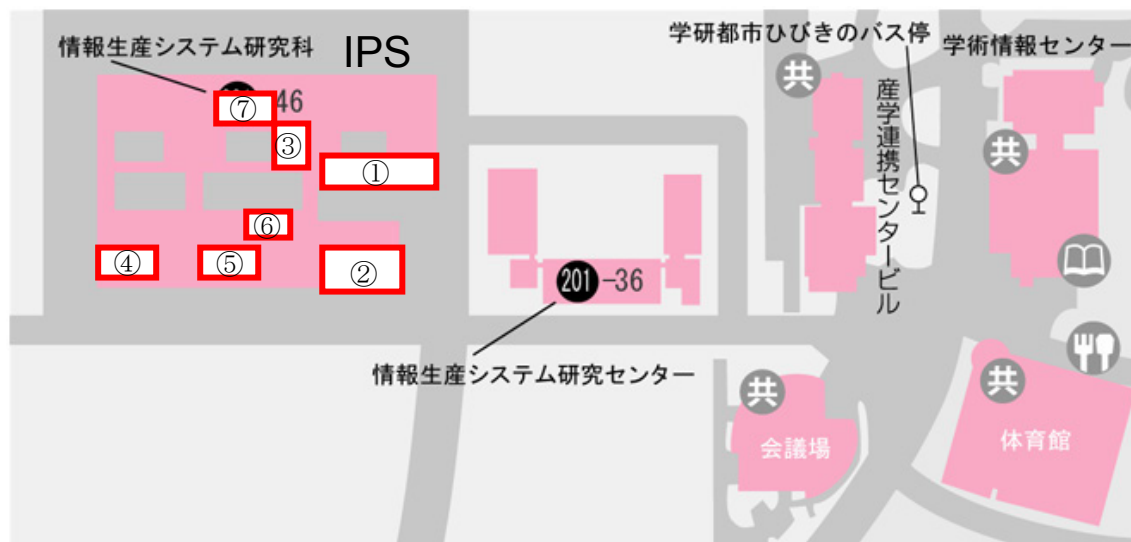
Student Computer Lab



[1]: Media Center (FAIS): 1st Floor Tele-Lecture Room1

[2]: IPS

[3]: Event Hall of Conference Center (FAIS)



共 北九州学術研究都市内の共用施設です

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|-------------------------|---------------------|
| ① Student Lobby | ② Gallery |
| ③ Student Computer Lab. | ④ Lecture Room S101 |
| ⑤ Lecture Room S104 | ⑥ Lecture Room S155 |
| ⑦ Computer Lab. 2 N159 | |