



**IIAI AAI 2013**

**IIAI International Conference on  
Advanced Applied Informatics 2013**

**August 31 - September 4, 2013  
Kunibiki Messe, Matsue, Japan**



**Conference Program**

# Organization

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## **IIAI AAI 2013 Organizing Chairs**

<b>General Chair</b>	Sachio Hirokawa, Kyushu University, Japan
<b>Program Chair</b>	Kiyota Hashimoto, Osaka Prefecture University, Japan
<b>Finance Chair / Publication Chair</b>	Tokuro Matsuo, Advanced Institute of Industrial Technology, Japan
<b>Local Arrangement Chair</b>	Yasuhiro Yamada, Shimane University, Japan

## **IIAI AAI 2013 Organizing Committees**

<b>Conference Chair (ESKM 2013)</b>	Sachio Hirokawa, Kyushu University, Japan
<b>Program Chairs (ESKM 2013)</b>	Kiyota Hashimoto, Osaka Prefecture University, Japan Eisuke Ito, Kyushu University, Japan
<b>Publicity Co-Chair (ESKM 2013)</b>	Tetsuya Nakatoh, Kyushu University, Japan
<b>Conference Chair (LTLE 2013)</b>	Chin-Chung Tsai, National Taiwan University of Science and Technology, Taiwan
<b>Program Chairs (LTLE 2013)</b>	Carol H.C. Chu, Soochow University, Taiwan Chengjiu Yin, Kyushu University, Japan
<b>Program Vice-Chairs (LTLE 2013)</b>	Oscar Fuhua Lin, Athabasca University, Canada Jie-Chi Yang, National Central University, Taiwan
<b>Special Session Chair (LTLE 2013)</b>	Yan Dong, Beijing Normal University, China
<b>Advisory Committee (LTLE 2013)</b>	Akihiro Kashihara, The University of Electro-Communications, Japan Hiroaki Ogata, University of Tokushima, Japan
<b>Conference Chair (IRIM 2013)</b>	Tomoko Torii, Ritsumeikan University, Japan
<b>Supreme Advisor (IRIM 2013)</b>	Reiko Yamada, Doshisha University, Japan
<b>Program Chairs (IRIM 2013)</b>	Masao Mori, Kyushu University, Japan Shigeru Asano, Kobe University, Japan
<b>Publicity Chair (IRIM 2013)</b>	Toshie Tanaka, Kyushu University, Japan
<b>Conference Chair (ICSCAI 2013)</b>	Naohiro Ishii, Aichi Institute of Technology / IIAI, Japan
<b>Program Chair (ICSCAI 2013)</b>	Katsuhide Fujita, Tokyo University of Agriculture and Technology, Japan
<b>Symposium Chair (ACIT 2013)</b>	Roger Lee, Software Engineering & Information Technology Institute, USA
<b>Program Chair (ACIT 2013)</b>	Satoshi Takahashi, University of Electro-Communications, Japan
<b>Publicity Chair (ACIT 2013)</b>	Teruhisa Hochin, Kyoto Institute of Technology, Japan

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**International Institute of Applied Informatics**

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**Kyushu University**  
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# Keynotes

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## ESKM 2013 Keynote Speech



### **Fairness Relations - Concepts, Properties, and Applications to Networking, Data Analysis and Optimization**

*Mario Koeppen (Kyushu Institute of Technology)*

Dr. Mario Koeppen was born in 1964. He studied physics at the Humboldt-University of Berlin and received his master degree in solid state physics in 1991. Afterwards, he worked as scientific assistant at the Central Institute for Cybernetics and Information Processing in Berlin and changed his main research interests to image processing and neural networks. From 1992 to 2006, he was working with the Fraunhofer Institute for Production Systems and Design Technology. He continued his works on the industrial applications of image processing, pattern recognition, and soft computing, esp. evolutionary computation. During this period, he achieved the doctoral degree at the Technical University Berlin with his thesis works: "Development of an intelligent image processing system by using soft computing" with honors.

He has published more than 150 peer-reviewed papers in conference proceedings, journals and books and was active in the organization of various conferences as chair or member of the program committee, incl. the WSC on-line conference series on Soft Computing in Industrial Applications, and the HIS conference series on Hybrid Intelligent Systems. He is founding member of the World Federation of Soft Computing, and also Associate Editor of the Applied Soft Computing journal. In 2006, he became JSPS fellow at the Kyushu Institute of Technology in Japan, and in 2008 Professor at the Network Design and Research Center (NDRC) and 2013 Professor at the Graduate School of Creative Informatics of the Kyushu Institute of Technology, where he is conducting now research in the fields of multi-objective and relational optimization, digital convergence and multimodal content management.

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## LTLE 2013 Keynote Speech



### **Strategies and research Issues of mobile and ubiquitous learning**

*Gwo-Jen Hwang (National Taiwan University of Science and Technology)*

Dr. Gwo-Jen Hwang is currently a Chair Professor at the National Taiwan University of Science and Technology. He received his Ph.D. degree in Computer Science and Information Engineering from the National Chiao Tung University in Taiwan in 1991. Dr Hwang serves as an editorial board member and a reviewer for more than 30 academic journals. His research interests include mobile and ubiquitous learning, computer-assisted testing, web-based learning, and artificial intelligence in education.

Dr. Hwang has published nearly 400 academic papers, including 150 papers in such professional journals as British Journal of Educational Technology, Computers & Education, Educational Technology & Society, Innovations in Education and Teaching International, Interactive Learning Environment, and Computer-Assisted Learning among others. Owing to the good reputation in academic research and innovative inventions in e-learning, he received the annual most Outstanding Researcher Award from the National Science Council in the years of 2007 and 2010. Moreover, in 2007, Dr. Hwang was elected as the Chair of the Special Interest Group of Mobile and Ubiquitous Learning in the Information Technology Education Division of the National Science Council in Taiwan. He has been serving the position since then.

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## IRIM 2013 Keynote/Invited Speech



### **History and Challenges of IR Activities in Thailand**

*Prof. Vilas Wuwongse (Thammasat University)*

Dr. Vilas Wuwongse obtained his B.Eng and M.Eng in Control Engineering in 1977 and 1979, respectively, and D.Eng in Systems Science in 1982, all from Tokyo Institute of Technology. He was a faculty member at the Asian Institute of Technology from 1982 to 2012 during which he also served as a Division Chairman and a Vice President. At present, he is a professor at Thammasat University. Dr. Wuwongse has chaired or co-chaired a number of international conferences and is serving as an editorial board member of international and national academic journals. His current research interests include linked data, metadata, e-Learning, e-Research and research management.

Dr. Wuwongse is now developing a set of metadata for e-Research and research management. The metadata set includes VIVO-based researcher profiles and metadata for research proposals, research proposal evaluation, progress reports, final reports as well as research data. It will support both the researchers and research funding organizations. Based on the metadata set, an open-source software system called Linked OpenScholar, an extension Harvard University (Bs OpenScholar, has been developed and will be put into real use. In addition, Dr. Wuwongse has led a team to design and implement one the largest and most complicated information systems for the Thai Revenue Department. The system has been used for more than 10 years and is still active. He has published over 150 academic papers in journals and conferences and is currently interested in practicable research, particularly in the development of practical, open information systems for academic and research management.

# Program

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## Saturday, August 31

15:30 - 16:15 Forum Discussion at Foyer (AAI attendees are invited.) + Coffee at Foyer

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## Sunday, September 1

10:30 - 12:00 **[ESKM 1]** **Room A**  
**Session Chair: Takashi Yamanoue (Kagoshima University, Japan)**

- Proposal of Seam Degree and Content Similarity for Web Page Segmentation  
*Jun Zeng, Brendan Flanagan, Qingyu Xiong, Junhao Wen, Sachio Hirokawa (Kyushu University, Japan)*
- Web Self-Controller: A Filtering Browser for Self-Control  
*Kyohei Yoshida, Shun Hattori (Muroran Institute of Technology, Japan)*
- Analyzing Grammy, Emmy, and Academy Awards Data using Regression and Maximum Information Coefficient  
*David Peacock, Gongzhu Hu (Central Michigan University, United States)*

10:30 - 12:00 **[ACIT 1]** **Room B**  
**Session Chair: Jun Miyazaki (NAIST, Japan)**

- Extending Distributed Online Machine Learning Framework for Streaming Video Analysis  
*Yusuke Tsuji, Hung-Hsuan Huang, Kyoji Kawagoe (Ritsumeikan University, Japan)*
- Finding Rare Web Pages by Relevancy and Atypicality in a Category  
*Takayuki Yumoto, Ryohei Tada, Manabu Nii, Kunihiko Sato (University of Hyogo, Japan)*
- A Path expression-Based Smoothing of Query Likelihood Model for XML Element Retrieval  
*Atsushi Keyaki, Jun Miyazaki, Kenji Hatano, Goshiro Yamamoto, Takafumi Taketomi, Hirokazu Kato (NAIST, Japan)*

13:30 - 15:00 **[ESKM 2]** **Room A**  
**Session Chair: Tetsunori Mine (Kyushu University, Japan)**

- Case-Based Support System for Collaborative Tourism Planning  
*Masaki Samejima (Osaka University, Japan)*
- An Inter-Wiki Page Data Processor for a M2M System  
*Takeshi Yamanoue, Kentaro Oda, Koichi Shimozone (Kagoshima University, Japan)*
- Evaluation of Tourism Resources Extraction based on Japanese Dependency Analysis  
*Tetsuya Nakatoh, Sachio Hirokawa (Kyushu University, Japan)*

13:30 - 15:00 **[ACIT 2]** **Room B**  
**Session Chair: I-Lin Wang (National Cheng Kung University, Taiwan)**

- Detecting Location-based Enumerating Bursts in Georeferenced Micro-Posts  
*Keiichi Tamura, Hajime Kitakami (Hiroshima University, Japan)*
  - Analyzing Bike Repositioning Strategies based on Simulations for Public Bike Sharing Systems  
*I-Lin Wang, Chun-Wei Wang (National Cheng Kung University, Taiwan)*
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## Monday, September 2

9:30 - 10:00 **Opening Ceremony** **International Conference Room**

10:00 - 11:00 **Keynote 1: IRIM** **International Conference Room**

13:00 - 14:00 **Keynote 2: ESKM** **International Conference Room**

14:00 - 15:00 **Keynote 3: LTLE** **International Conference Room**

**15:20** **Bus Departure for Reception from Kunibiki Messe**

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17:30 - 19:00 **Reception**

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**Tuesday, September 3**

- 8:45 - 10:15** [ESKM 3] **Room A**  
**Session Chair: Yucong Duan (Hainan University, China)**
- A Study on Support Systems of the Library Reference Service: Using Reference Examples and Library Pathfinders  
*Yasuro Nakao (Kyushu University, Japan)*
  - Keywords frequency trend analysis of online novels  
*Eisuke Ito, Takahiro Urakawa, Brendan Flanagan, Sachio Hirokawa (Kyushu University, Japan)*
  - Using the Log File As a Knowledge Base  
*Dapeng Liu, Shaochun Xu (Algoma University, Canada)*
- 8:45 - 10:15** [ACIT 3] **Room B**  
**Session Chair: Kazunari Morimoto (Kyoto Institute of Technology, Japan)**
- A Study of Evaluating the Process of Mastering Skills Including Pause and Adjustment  
*H. Sawai, K. Tomotake, Y. Ishii, K. Ueno, E. Koyama (Kyoto Institute of Technology, Japan)*
  - Representation method for significant pauses in a multimodal motion learning system  
*Masahiro Araki (Kyoto Institute of Technology, Japan)*
  - Visualizing Velocity and Acceleration on Augmented Practice Mirror Self-Learning Support System of Physical Motion  
*Itaru Kuramoto, Yukari Nishimura, Keiko Yamamoto, Yu Shibuya, Yoshihiro Tsujino (Kyoto Institute of Technology, Japan)*
- 8:45 - 10:15** [LTLE 1] **Room C**  
**Session Chair: Chu Hui-Chun (Soocchow University, Taiwan)**
- Effects of prior knowledge on cognitive learning outcomes within an English learning multiplayer online role-playing game  
*Jie Chi Yang, Hui Fen Hsu (Graduate Institute of Network Learning Technology National Central University, Taiwan)*
  - Quiz Creating and Answering Activities of Across Grades using Multi-Mouse Quiz System in the Period for Integrated Studies in an Elementary School  
*Juan Zhou, Takahisa Watagoshi, Mikihiro Mori, Hajime Kita (Graduate School of Informatics Kyoto University, Japan)*
  - A Prompt-based Annotation Approach to Conducting Mobile Learning Activities for Architecture Design Courses  
*Han-Yu Sung, Gwo-Jen Hwang, Shih-Yu Liu (National Taiwan University of Science and Technology, Taiwan)*
- 8:45 - 10:15** [IRIM] **Room D**  
**Session Chair: Masao Mori (Kyushu University, Japan)**
- Assessment Indicators as a Tool of Process Monitoring and Benchmarking  
*Soichiro Aihara (Osaka Kun-ei Women's College, Japan)*
  - Institutional Research in a University without Regular Institutional Management  
*Miho Funamori (The University of Tokyo, Japan)*
  - Cooperative Development and Individual Operation for Information Systems of IR in a Virtual Environment  
*Tetsuya Oishi, Masao Mori, Toshie Tanaka, Eisuke Ito (Kyushu University, Japan)*
- 10:30 - 12:00** [ESKM 4] **Room A**  
**Session Chair: Toshiro Minami (Kyushu Institute of Information Science, Japan)**
- Preliminary Study on Using Accelerometers to Measure Involuntary Movements for the Assessment of Neurological Motor Impairments  
*Yu Iwasaki, Tetsuya Hiroto, Hiroaki Oguro, Morihiko Nakamura (Shimane University, Japan)*
  - Estimating Feature Terms for Supporting Exploratory Browsing of Twitter Timelines  
*Shota Itokawa, Shun Shiramatsu, Tadachika Ozono, Tbramatsu Shintani (Nagoya Institute of Technology, Japan)*
  - Prediction of Growth Rate of Operating Income using Securities Reports  
*Tetsuya Nakatoh, Hirofumi Amano, Sachio Hirokawa (Kyushu University, Japan)*
- 10:30 - 12:00** [ACIT 4] **Room B**  
**Session Chair: Kazunari Morimoto (Kyoto Institute of Technology, Japan)**
- Feasibility of Unified Usage of Heterogeneous Databases Storing Private Information  
*Xin Wang, Teruhisa Hochin, Hiroki Nomiya (Kyoto Institute of Technology, Japan)*
  - Deriving Fundamental Movements Based on Pauses for Transmitting Traditional Skills  
*Teruhisa Hochin, Hiroki Nomiya (Kyoto Institute of Technology, Japan)*
  - Inner specialization and generalization in semantic specialization and generalization  
*Teruhisa Hochin, Hiroki Nomiya (Kyoto Institute of Technology, Japan)*
- 10:30 - 12:00** [LTLE 2] **Room C**  
**Session Chair: Jie Chi Yang (National Central University, Taiwan)**
- Learning Diagnosis Instruction System Based on Game-based Learning for Mathematical Course  
*Shu-Hsien Huang, Ting-Ting Wu, Yueh-Min Huang (National Cheng Kung University, Taiwan)*
  - Build A Search Engine To Support Doing Research Surveys On SNS  
*Chengjiu Yin, Brendan Flanagan, Sachio Hirokawa, Yoshiyuki Tabata (Kyushu University, Japan)*
  - The Development and Application of a Repertory Grid-Oriented Ubiquitous Augmented Reality Learning System  
*Hui-Chun Chu, Chia-Wei Lin (Soocchow University, Taiwan)*
  - Designing a RPG Game for Learning of Math Concepts  
*Ming-Puu Chen, Hsin-Yao Ren (National Taiwan Normal University, Taiwan)*
- 10:30 - 12:00** [ICSCAI 1] **Room D**  
**Session Chair: Katsuhide Fujita (Tokyo University of Agriculture and Technology, Japan)**
- A GPU-based Framework for Large-scale Multi-Agent Traffic Simulations  
*Yoshihito Sano, Naoki Fukuta (Shizuoka University, Japan)*

- Study and Development of Schedule Application for Autistic Children  
*Ippei Torii, Kaoruko Ohtani, Takahito Niwa, Naohiro Ishii (Aichi Institute of Technology, Japan)*
- Authoring Animations of Virtual Objects with a Finger in AR-based 3D Space  
*Manabu Eitsuka, Masahito Hirakawa (Shimane University, Japan)*

**13:30 - 15:30**

**[ESKM 5]**

**Session Chair: Amil A. Ilham (Hasanuddin University, Indonesia)**

**Room A**

- Releasing the Power of Variability: Towards Constraint Driven Quality  
*Yucong Duan, Abdelrahm Osman Elf., Wencai Du (Hainan University, China)*
- An Improved Genome based Keyword Extraction Technique  
*Dafni Rose, Divya Dev, Rene Robin (St. Joseph's Institute of Technology, India)*
- Reciprocal Recommendation for Job Matching with Bidirectional Feedback  
*Tsunenori Mine, Tomoyuki Kakuda, Akira Ono (Kyushu University, Japan)*
- Towards measuring of E Learning Usability through User Interface  
*Abdelrahman Osman Elfaki, Ruzi Bachok, Yucong Duan, Wencai Du, Md Gapar Md Johar, Sim Fong (Management and Science University, Malaysia)*

**13:30 - 15:30**

**[ACIT 5]**

**Session Chair: Kazunari Morimoto (Kyoto Institute of Technology, Japan)**

**Room B**

- Analysis of Stroke Motion in Drawing by Experts for Development of Drawing Learning Support System  
*Keiko Yamamoto, Kazuo Yasuda, Itaru Kuramoto, Yoshihiro Tsujino (Kyoto Institute of Technology, Japan)*
- The effects on the popularities and interests mascot characters' acceptability give to the general public  
*Chikako Tateishi, Gaku Inou, Hiroko Sawai, Emi Koyama, Yoji Kitani, Mikio Fujito (Kyoto Institute of Technology, Japan)*
- Learning Which Features to Imitate in a Painting Task  
*Tetsuya Sakato, Motoyuki Ozeki, Natsuki Oka (Kyoto Institute of Technology, Japan)*
- An Analysis of Body Movements to Sharpen Cutlery by Kyoto Bow Artisan  
*Kazunari Morimoto, Noriaki Kuwahara (Kyoto Institute of Technology, Japan)*

**13:30 - 15:30**

**[ESKM-SS AG 1]**

**Session Chair: Alireza Ahrary (Sojo University, Japan)**

**Room C**

- Big Data's and Opportunities for ICT Agriculture  
*Dennis A. Ludena R., Alireza Ahrary, Noriko Horibe (Sojo University, Japan)*
- Fundamental study on ozone treatment of soil for agricultural application  
*Takuya Nagatomo, Keisuke Takigawa, Takamasa Sakai, Fumiaki Mitsugi, Tomoaki Ikegami, Kenji Ebihara (Kumamoto University, Japan)*
- Development of Flexible User Need's Investigation System based on XML Conversions  
*Masao Hattori, Keiichi Matsumoto, Noriko Horibe, Alireza Ahrary, Kouichi Hirata (Sojo University, Japan)*

**13:30 - 15:30**

**[ICSCAI 2]**

**Session Chair: Naoki Fukuta (Shizuoka University, Japan)**

**Room D**

- Population-based Modified Extremal Optimization for Contact Map Overlap Maximization Problem  
*Akihiro Nakada, Keiichi Tamura, Hajime Kitakami, Yoshifumi Takahashi (Hiroshima City University, Japan)*
- Estimation Technique of Friction Caused by Robot Walking Motion  
*Koichi Kurita (Kinki University, Japan)*
- Efficient Automated Negotiation Approach for non-monotonic utility based on Tree Representations  
*Katsuhide Fujita (Tokyo University of Agriculture and Technology, Japan)*

**15:30 - 16:15**

**Coffee Break and Poster Presentation**

**Foyer**

- Proposal of a Matching System for Companies and Researchers Using Patents and Scientific Papers  
*Yasuhiro Yamada, Terutaka Tansho, Sachio Hirokawa (Shimane University, Japan)*
- Optimal Decision-making in Fuzzy Multi-stage Supply Chains With Echelon Stock Policy  
*Bein-Hong Chang, Shih-Pin Chen (National Chung Cheng University, Taiwan)*
- The Examination of Institutional Research through the lens of Action Research  
*Toru Kawaki, Tomoko Torii, Takashi Kawanabe, Yuma Ishimoto (Ritsumeikan University, Japan)*
- An Effective Disaster Evacuation by Solving Distributed Constraint Optimization Problem  
*Katsuya Kinoshita, Kayo Iizuka, Yasuki Iizuka (Tokai University, Japan)*
- Lecture Movie Retrieval System using Speech Recognition Technology  
*Yoshitomo Yaginuma (The Open University of Japan, Japan)*
- Designing a Novice Programming Environment for RoboCup Soccer 2D Simulation  
*Yasuki Iizuka, Shun Enari, Katsuya Kinoshita (Tokai University, Japan)*
- Introduction of practical cases for systematic management of Liberal Arts education  
*Katsuichi Higuchi, Mariko Hirano, Isamu Saeki, Toru Murakami (Otemon Gakuin University, Japan)*
- Reflective Family Social Work" for Specialists of Re-education Program  
*Yasuhiro Niikawa (Kansai University of Welfare Sciences, Japan)*
- Visualization of PageRank Algorithm by using Multi-Agent Model for Education  
*Yuki Yasuda, Naoto Mukai, Naohiro Ishii (Sugiyama Jogakuen University, Japan)*
- Versatile Career Consulting Tool  
*Taku Jiromaru, Tokuro Matsuo (Yamagata University, Japan)*
- Designing Learning Object Repository Using First Order Logic  
*Abdelrahman Osman Elfaki, Yucong Duan, Sim Liew Fong, Md Gapar Md Johar, Wencai Du (Management and Science University, Malaysia)*

**16:45**

**Bus Departure for Banquet from Kunibiki Messe**

**18:30 – 20:00**

**Banquet and Award Presentation**

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**Wednesday, September 4**

- 8:45 - 10:15 [ESKM 6] Room A**  
**Session Chair: Tetsuya Nakatoh (Kyushu University, Japan)**
- Investigation of Students' Attitudes to Lectures with Text-Analysis of Questionnaires  
*Toshiro Minami, Yoko Ohura (Kyushu Institute of Information Sciences, Japan)*
  - Neighborhood User Estimation from Web Access Log in EC Service  
*Tomohiro Koketsu, Hidekazu Yanagimoto, Michifumi Yoshioka (Osaka Prefecture University, Japan)*
  - A Framework for Mobile eLearning (mLearning) with Content Security and Authentication  
*Jahangir Dewan, Morshed Chowdhury (Deakin University, Australia)*
- 8:45 - 10:15 [ACIT 6] Room B**  
**Session Chair: Jun Miyazaki (NAIST, Japan)**
- Ontology Extraction Considering Content Concordance from Tagging to Web Pages in Similar SBM Users  
*Fumiko Harada, Hiromitsu Shimakawa (Ritsumeikan University, Japan)*
  - Extracting Information Seeking Behavior from The Collaborative Reference Database  
*Hironao Yomegane, Saori Kitahara, Kenji Hatano (Doshisha University, Japan)*
  - Parallel indexing of large multi-dimensional data  
*Kenta Funaki, Teruhisa Hochin, Hiroki Nomiya, Hideya Nakanishi, Mamoru Kojima (Kyoto Institute of Technology, Japan)*
- 8:45 - 10:15 [LTLE 3] Room C**  
**Session Chair: Takahiko Suzuki (Kyushu University, Japan)**
- Preliminary Construction of Instant Qualitative Feedback System in Foreign Language Teaching  
*Yuichi Ono, Mitsuo Yamashiro, Manabu Ishihara (University of Tsukuba, Japan)*
  - Tablet Typed Teaching Materials Sharing System with Supporting Handwriting  
*Katsuya Ide, Youji Ochi (Kinki University, Japan)*
  - Applying pedagogical approaches to enhance learning  
*Lisa-Christina Winter, Simone Kopeinik, Aurora Dimache, Attracta Brennan, Dietrich Albert, Tom Roche (Graz University of Technology, Austria)*
- 8:45 - 10:15 [ESKM-SS DM 1] Room D**  
**Session Chair: Tetsuhiro Miyahara (Hiroshima City University, Japan)**
- Clustering of Positions in Nucleotide Sequences by Trim Distance  
*Takaharu Shimada, Issei Hamada, Kouichi Hirata, Tetsuji Kuboyama, Kouki Yonezawa, Kimihito Ito (Kyushu Institute of Technology, Japan)*
  - Hardness of Learning Unordered Tree Contraction Patterns  
*Yasuhiro Okamoto, Takayoshi Shoudai (Kyushu University, Japan)*
  - Acquisition of Characteristic Tree Patterns with VLDC's by Genetic Programming and Edit Distance  
*Shohei Nakai, Tetsuhiro Miyahara, Tetsuji Kuboyama, Tomoyuki Uchida, Yusuke Suzuki (Hiroshima City University, Japan)*
- 10:30 - 12:00 [ESKM-SS AG 2] Room A**  
**Session Chair: Noriko Horibe (Sojo University, Japan)**
- A Proposal for an Agricultural Irrigation Control System Based on Support Vector Machine  
*Yuya Suzuki, Kazumi Nakamatsu, Hiroshi Mineno (Shizuoka University, Japan)*
  - Development of Knowledge Sharing System for Agriculture Application  
*Tomoki Uchinuno, Yujirou Yasunaga, Matsumoto Keiichi, Noriko Horibe, Shin-ichi Aoqui (Sojo University, Japan)*
  - Control of microorganism by sound wave : Effects of sound wave on enzyme balance in koji -  
*Noriaki Saigusa, Seika Imayama, Shin-ichi Aoqui, Yuji Teramoto (Sojo University, Japan)*
- 10:30 - 12:00 [ACIT 7] Room B**  
**Session Chair: Gongzhu Hu (Central Michigan University, USA)**
- Hotel Recommendation Based On Surrounding Environments  
*Zhichao Chang, Mohammad Shamsul Arefin, Yasuhiko Morimoto (Hiroshima University, Japan)*
  - Analyzing One-Channel EEG Signals for Detection of Close and Open Eyes Activities  
*Melis Oner, Gongzhu Hu (Central Michigan University, United States)*
  - Smart Interactive Advertising Board (SIAB)  
*Baker Alrubaiey, Morshed Chowdhury, Atul Sajjanhar (Deakin University, Australia)*
- 10:30 - 12:00 [LTLE 4] Room C**  
**Session Chair: Youji Ochi (Kinki University, Japan)**
- Adaptive Learning Using an integration of competence model with Knowledge Space Theory  
*Onjira Sitthisak, Lester Gilbert, Dietrich Albert (Thaksin University, Thailand)*
  - Irregularities In Candidates Selection Of Multi-Aimed University Entrance Examinations  
*Takahiko Suzuki, Keiji Ayukawa, Takeshi Michiwaki (Kyushu University, Japan)*
- 10:30 - 12:00 [ESKM-SS DM 2] Room D**  
**Session Chair: Tetsuji Kuboyama (Gakushuin University, Japan)**
- A Dynamic Programming A\* Algorithm for Computing Unordered Tree Edit Distance  
*Takuya Yoshino, Shoichi Higuchi, Kouichi Hirata (Kyushu Institute of Technology, Japan)*
  - Structure-based Data Mining and Screening for Network Traffic Data  
*Hisashi Tsuruta, Takayoshi Shoudai (Kyushu University, Japan)*

## IIAI AAI 2013 Program at a Glance

August 31 (Sat)						
15:00 – 16:00	<b>Registration at Room D</b>					
15:30 – 16:15	Forum Discussion at Room D (AAI attendees are invited.) + Coffee at Room D					
September 1 (Sun)						
	Foyer	Room A (301)	Room B (302)	Room C (303-304)	Room D (305-306)	Room E (401)
10:00 – 16:00	<b>Registration</b>					
10:30 – 12:00	ESKM 1	ACIT 1				
12:00 – 13:30	Lunch (take on your own) + Coffee (served at Foyer)					
13:30 – 15:00	ESKM 2	ACIT 2				MJIR
15:00 – 16:30						MJIR
15:00 – 16:00	Welcome cocktail					
September 2 (Mon)						
	Foyer	Room A (301)	Room B (302)	Room C (303-304)	Room D (305-306)	Room E (401)
8:30 – 16:00	<b>Registration</b>					
9:30 – 10:00	Opening Ceremony (International Convention Room)					
10:00 – 11:00	Keynote 1: IRIM (International Convention Room)					
12:00 – 13:30	Lunch (take on your own) + Coffee (served at Foyer)					
13:00 – 14:00	Keynote 2: ESKM (International Convention Room)					MJIR
14:00 – 15:00	Keynote 3: LTLE (International Convention Room)					MJIR
15:20 – 16:00	Bus departure time for Reception Place on 15:20					
17:00 – 19:00	Reception					
	For your information, Matsue castle is opening until 18:30. You may enjoy going the top of the castle.					
September 3 (Tue)						
	Foyer	Room A (301)	Room B (302)	Room C (303-304)	Room D (305-306)	Room E (401)
8:30 – 16:00	<b>Registration</b>					
8:45 – 10:15	ESKM 3	ACIT 3	LTLE 1	IRIM		
10:15 – 10:30	Coffee					
10:30 – 12:00	ESKM 4	ACIT 4	LTLE 2	ICSCAI 1		
12:00 – 13:30	Lunch (take on your own) + Poster setting					
13:30 – 15:30	ESKM 5	ACIT 5	ESKM SS AG 1	ICSCAI 2		
15:30 – 16:15	Coffee Break and Poster Presentation					
16:45 -	Bus departure from the entrance for Yushien at 16:45. Enjoy walking Japanese garden until 18:00.					
18:30 – 20:00	Banquet and Award Presentation					
September 4 (Wed)						
	Foyer	Room A (301)	Room B (302)	Room C (303-304)	Room D (305-306)	Room E (401)
8:30 – 12:00	<b>Registration</b>					
8:45 – 10:15	ESKM 6	ACIT 6	LTLE 3	ESKM SS DM 1		
10:15 – 10:30	Coffee					
10:30 – 12:00	ESKM SS AG 2	ACIT 7	LTLE 4	ESKM SS DM 2		
12:00 – 12:30	Conference adjournment + Coffee at Foyer					

## IIAI's Forthcoming Conferences

### IIAI International Conference on Advanced Information Technologies (IIAI AIT 2013)

<http://ait2013.iaiai.org>

November 28 - 30, 2013, Jakarta, Indonesia  
HOTEL ARYADUTA JAKARTA



Full Papers due: September 20, 2013  
Short/Poster Papers due: September 25, 2013  
Notification (Short/Poster papers): October 10, 2013  
Camera-ready papers due: October 25, 2013  
Early Registration due: October 25, 2013

### IIAI International Conference on Advanced Applied Informatics (IIAI AAI 2014)

<http://aai2014.iaiai.org>

August 31 - September 4, 2014, Kitakyushu, Japan  
Kitakyushu International Conference Center



Special Sessions / Workshops proposal due: Jan 20, 2014  
Full Papers due: March 28, 2014  
Short/Poster Papers due: April 13, 2014  
Notification (Full / Short / Poster papers): May 10, 2014  
Camera-ready & Early Registration due: May 31, 2014