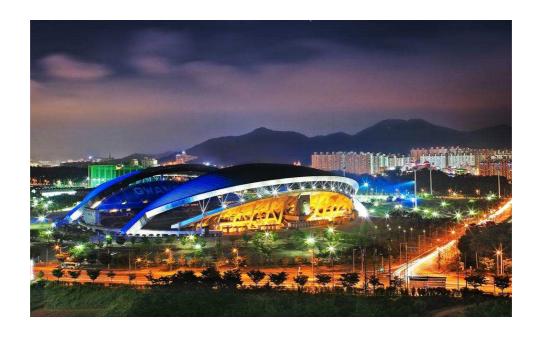
PROGRAM GUIDE



NBiS-2013

The 16^{th} International Conference on Network-Based Information Systems



September 4^{th} - September 6^{th} , 2013 Gwangju, KOREA

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Welcome Message from the Steering Committee Co-chairs NBiS 2013

Welcome to the 16th International Conference on Network-Based Information Systems (NBiS 2013), which will be held in Gwangju, Korea from September 4 to September 6, 2013.

The main objective of NBiS is to bring together scientists, engineers, and researchers from both network systems and information systems with the aim of encouraging the exchange of ideas, opinions, and experiences between these two communities.

NBiS started as a workshop and was held for 12 years together with DEXA International Conference as one of the oldest among DEXA Workshops. The workshop was very successful. In 2009 the NBiS was held at Indianapolis, USA as an independent International Conference supported by many international volunteers. In following years, the NBiSs were held in Takayama, Gifu, Japan (2010), Tirana, Albania (2011) and Melbourne, Australia (2012).

In this edition of NBiS, many papers were submitted from all over the world. They were carefully reviewed and only high quality papers will be presented during conference days. In conjunction with NBiS 2013 are held also 11 International Workshops where specific and hot topics are deeply discussed.

Many volunteer people have kindly helped us to prepare and organize NBiS 2013. First of all, we would like to thank Prof. James J. (Jong Hyuk) Park, SeoulTech, Korea, Prof. Minoru Uehara, Toyo University, Japan and Prof. Fatos Xhafa, Technical University of Catalonia, Spain for organizing NBiS 2013 as General Co-Chairs. We would like to thank Dr. Hangbae Chang, Sangmyung University, Korea, Prof. Hiroaki Kikuchi, Meiji University, Japan and Dr. Salvatore Vitabile, University of Palermo, Italy as NBiS 2013 Program Co-Chairs. We would like to express our thanks to Dr. Jaehwa Chung, Korea National Open University, Korea, Prof. Tomoya Enokido, Rissho University, Japan and Dr. Wenny Rahayu, La Trobe University, Australia as Workshops Co-Chairs for inviting interesting workshops. We would like to thank all NBiS 2013 Organizing Committee Members, Program Committee Members and other volunteers for their great help and support. We have special thanks to Dr. Makoto Ikeda, Ms. Evjola Spaho and Mr. Elis Kulla for distributing the call for papers and other information of NBiS 2013 and maintaining the web page.

Finally, we greatly appreciate Gwangju Convention Bureau for their great efforts to organize NBiS 2013. Without them, we could not organize NBiS 2013 in Gwangju.

NBiS-2013 Steering Committee Co-Chairs

Leonard Barolli, Fukuoka Institute of Technology (FIT), Japan Makoto Takizawa, Hosei University, Japan

Welcome Message from the General Co-chairs NBiS 2013

We would like to welcome you to the 16th International Conference on Network-Based Information Systems (NBiS 2013), which will be held in Gwangju, Korea from September 4 to September 6, 2013.

It is our honour to chair this prestigious conference, as one of the important conferences in the field. Extensive international participation, coupled with rigorous peer reviews, has made this an exceptional technical conference. The Technical Program and Workshops add important dimensions to this event. We hope that you will enjoy each and every component of this event and benefit from interactions with other attendees.

Since its inception, NBiS has attempted to bring together people interested in information and networking, in areas that range from the theoretical aspects to the practical design of new network systems, distributed systems, multimedia systems, Internet/web technologies, mobile computing, intelligent computing, pervasive/ubiquitous networks, dependable systems, semantic services, Grid, P2P, and scalable computing. For NBiS 2013, we have continued these efforts as novel networking concepts emerge and new applications flourish. NBiS 2013 consists of the main conference and 11 workshops/symposia. We received 148 papers, and out of them 35 were accepted (about 24% acceptance ratio), which will be presented during three days of the conference.

The organization of an international conference requires the support and help of many people. A lot of people have helped and worked hard for a successful NBiS 2013 technical program and conference proceedings. First, we would like to thank all the authors for submitting their papers. We are indebted to Program Area chairs, Program Committee members and reviewers who carried out the most difficult work of carefully evaluating the submitted papers.

We would like to give our special thanks to Prof. Leonard Barolli and Prof. Makoto Takizawa the chairs of the Steering Committee for giving us the opportunity to hold this conference and for their guidance on organizing the conference. We would like to thank Dr. Hangbae Chang, Sangmyung University, Korea, Prof. Hiroaki Kikuchi, Meiji University, Japan and Dr. Salvatore Vitabile, University of Palermo, Italy as NBiS 2013 Program Co-Chairs. We would like to express our appreciation to Dr. Jaehwa Chung, Korea National Open University, Korea, Prof. Tomoya Enokido, Rissho University, Japan and Dr. Wenny Rahayu, La Trobe University, Australia as Workshops Co-Chairs.

We would like to express our great appreciation to our keynote speaker Dr. David Taniar, Monash University, Australia for accepting our invitation as keynote speaker of NBiS 2013. We would like to thank the Local Arrangements Chairs and Gwangju Convention Bureau for their great support and help and for making good local arrangements for the conference.

We hope that you have an enjoyable and productive time during this conference, and have a great time in Gwangju, Korea.

NBiS-2013 General Co-Chairs

James J. (Jong Hyuk) Park, SeoulTech, Korea Minoru Uehara, Toyo University, Japan Fatos Xhafa, Technical University of Catalonia, Spain

Welcome Message from the Program Committee Co-chairs NBiS 2013

Welcome to the 16th International Conference on Network-Based Information Systems (NBiS 2013), which will be held in Gwangju, Korea from September 4 to September 6, 2013.

The purpose of NBiS conference is to bring together developers and researchers to share ideas and research work in the emerging areas of network and information systems.

The contributions included in the proceedings of NBiS 2013 cover all aspects of theory, design and application of computer networks and information systems. There are many topics of information networking such as cloud computing, wireless sensor networks, ad hoc networks, peer-to-peer systems, grid computing, social networking, multimedia systems and applications, security, distributed and parallel systems and mobile computing.

In this edition, 148 submissions were received from all over the world. Each submitted paper was peer- reviewed by Program Committee members and external reviewers who are experts in the subject area of the paper. Then Program Committee accepted 35 papers (about 24% acceptance ratio). In the conference program is included the distinguished keynote address by Dr. David Taniar, Monash University, Australia.

The organization of an International Conference requires the support and help of many people. First, we would like to thank all authors for submitting their papers. We would like to thank all Track Chairs and Program Committee Members, who carried out the most difficult work of carefully evaluating the submitted papers. We also would like to thank NBiS 2013 Workshops Chairs for organizing excellent workshops with NBiS 2013 conference.

We would like to give special thanks to Prof. Leonard Barolli and Prof. Makoto Takizawa the Chairs of the Steering Committee of NBiS for their strong encouragement, guidance, insights, and for their effective coordination of conference organization. We would like to greatly thank General Co-Chairs: Prof. James J. (Jong Hyuk) Park, SeoulTech, Korea, Prof. Minoru Uehara, Toyo University, Japan and Prof. Fatos Xhafa, Technical University of Catalonia, Spain for their great support and invaluable suggestions to make the conference a very successful event. We would like to express our great appreciation to Dr. Makoto Ikeda, Ms. Evjola Spaho and Mr. Elis Kulla, Fukuoka Institute of Technology, Japan for their great efforts and efficient work to deal with many conference matters.

We hope you will enjoy the conference and have a great time in Gwangju, Korea.

NBiS-2013 Program Committee Co-Chairs

Hangbae Chang, Sangmyung University, Korea Hiroaki Kikuchi, Meiji University, Japan Salvatore Vitabile, University of Palermo, Italy

Welcome Message from the Workshops Co-chairs NBiS 2013

Welcome to the NBiS 2013 workshops to be held in conjunction with the 16th International Conference on Network-Based Information Systems (NBiS 2013), which will be held from 4-6 September 2013 in Gwangju, Korea.

The goal of NBiS 2013 workshops is to provide a forum for international researchers and practitioners to exchange and share their new ideas, research results, and ongoing work on leading-edge topics in the different fields of network-based information systems and their applications. Some of the accepted workshops deal with topics that open up perspectives beyond the ordinary, thus, enriching the topics usually addressed by the NBiS 2013 conference.

For this edition, the following workshops will be held with NBiS 2013.

- 1. The 8th International Workshop on Network-Based Virtual Reality and Tele-existence (IN-VITE 2013)
- 2. The 7th International Workshop on Advanced Distributed and Parallel Network Applications (ADPNA 2013)
- 3. The 6th International Workshop on Information Technology for Innovative Services (ITIS 2013)
- 4. The 4th International Workshop on Frontiers in Ubiquitous Computing, Networking and Applications (NeoFusion 2013)
- 5. The 4th International Workshop on Intelligent Sensors and Smart Environments (ISSE 2013)
- 6. The 4th International Workshop on Trustworthy Computing (TwC 2013)
- 7. The 4th International Workshop on Heterogeneous Networking Environments and Technologies (HETNET 2013)
- 8. The 2nd International Workshop on Web Services and Social Media (WSSM 2013)
- 9. The 2nd Workshop on Advances in Data Engineering and Mobile Computing (DEMoC 2013)
- 10. The 3rd International Workshop on Information Networking and Wireless Communications (INWC 2013)
- 11. The International Workshop on Mobile Cloud Computing Technologies and Applications (MCCTA 2013)

We would like to thank the community for their great response to NBiS 2013 workshops. The excellent technical program of the workshops was the result of a professional work from workshop chairs, workshop program committees, reviewers, and authors.

We would like to give our special thanks to Prof. Leonard Barolli and Prof. Makoto Takizawa the Steering Committee Chairs of NBiS conference for their strong encouragement and guidance to organize the NBiS 2013 workshops and symposiums. We would like to thank NBiS 2013 General Co-Chairs, Prof. James J. (Jong Hyuk) Park, Prof. Minoru Uehara, and Prof. Fatos Xhafa for their advices to make possible organization of NBiS 2013 workshops and symposiums. We are thankful to NBiS 2013 Program Co-Chairs, Dr. Hangbae Chang, Dr. Hiroaki Kikuchi, and Dr. Salvatore Vitabile for their support and help to prepare the technical program of NBiS 2013 workshops and symposiums. We would like to express special thanks to NBiS 2013 Web Administrator Chairs, Dr. Makoto Ikeda, Ms. Evjola Spaho and Mr. Elis Kulla, for their timely unlimited support for

managing the conference systems. We also would like to thank NBiS 2013 Local Arrangement Cochairs, Dr. Min Choi, Dr. Cheonshik Kim, and Dr. Namje Park for making the local arrangement for the conference and workshops.

We wish all of you entertaining and rewarding experience in all workshops and NBiS 2013 conference.

NBiS-2013 Workshops Co-Chairs

Jaehwa Chung, Korea National Open University, Korea Tomoya Enokido, Risho University, Japan Wenny Rahayu, La Trobe University, Australia

NBiS-2013 Conference Organizing Committee

Honorary Co-Chair

Doo-Soon Park, SoonChunHyang University, Korea

General Co-Chairs

James J. (Jong Hyuk) Park, SeoulTech, Korea Minoru Uehara, Toyo University, Japan Fatos Xhafa, Technical University of Catalonia, Spain

Program Committee Co-Chairs

Hangbae Chang, Sangmyung University, Korea Hiroaki Kikuchi, Meiji University, Japan Salvatore Vitabile, University of Palermo, Italy

Workshops Co-Chairs

Jaehwa Chung, Korea National Open University, Korea Tomoya Enokido, Rissho University, Japan Wenny Rahayu, La Trobe University, Australia

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Makoto Ikeda, Fukuoka Institute of Technology, Japan Elis Kulla, Fukuoka Institute of Technology, Japan Evjola Spaho, Fukuoka Institute of Technology, Japan

Steering Committee Co-Chairs

Leonard Barolli, Fukuoka Institute of Technology (FIT), Japan Makoto Takizawa, Hosei University, Japan



NBiS-2013 Main Conference and Workshops Program

Wednesday, September 4, 2013

08:30-09:00 Registration

09:00-10:30 Parallel Sessions

NBiS-S1: Parallel and Distributed Systems - HALL D

Chair: Fatos Xhafa, Technical University of Catalonia, Spain

- 1. FPGA-Driven Table System to Accelerate Network Flows
 Ralph Duncan, Peder Jungck, Andy Norton, Kenneth Ross, Greg Triplett
- 2. Redundant Execution Algorithm for Reducing Total Power Consumption of Server Clusters by Differentiating the Starting Time of Processes

 Tomoya Enokido, Ailixier Aikebaier, Makoto Takizawa
- 3. 3 Tiers Storage Model for Low Throughput Off-Line Storage $Minoru\ Uehara$
- 4. A Simulated Annealing Algorithm for Ground Station Scheduling Problem Fatos Xhafa, Xavier Herrero, Admir Barolli, Makoto Takizawa
- 5. Optimized Hash Lookup for Bloom Filter Based Packet Routing Dagang Li, Pei Chen

NeoFusion-S1: Ubiquitous Computing - HALL E

Chair: Kangbin Yim, Soonchunhyang University, Korea

1. Emotional Recognition from Facial Expression Analysis Using Bezier Curve Fitting Yong-Hwan Lee, Woori Han, Youngseop Kim

- 2. A Novel Resource Allocation Heuristic for a Power Constrained Data Center Shuo Zhang, Baosheng Wang, Baokang Zhao, Zhenghu Gong, Jing Tao
- 3. Study on Collaboration System Constructions in Medical Sites

 Hwa Gyoo Park, Yim Kang Bin
- 4. GEESE: A Cognitive USN Platform

 Junyoung Park, Youngjun Lee, Kyungroul Lee, Hanggon Kim, Dmitry Volokhov, Kangbin

 Yim

10:30-10:40 Coffee Break

10:40-12:10 Parallel Sessions

NBiS-S2: Multimedia Applications and Social Networking - HALL D

Chair: Makoto Takizawa, Hosei University, Japan

- 1. Single Document Summarization Based on Triangle Analysis of Dependency Graphs Kai Cheng, Yanting Li, Xin Wang
- 2. Video over Software-Defined Networking (VSDN) Harold Owens_II, Arjan Durresi
- 3. A Persistence Analysis of Smartphone Application Stores: An Approach to Understanding Gateways to the Internet Toshihiko Yamakami
- 4. Analysis of Heterogeneous Complex Networks Using the Degree of Diffusion Eman Aldwaisan, Maytham Safar, Khaled Mahdi

NeoFusion-S2: Ubiquitous Security and Intelligent System - HALL E

Chair: Hae-Duck Joshua Jeong, Korean Bible University, Korea

- 1. Secure Aggregation and Attack Detection for Smart Grid System Inshil Doh, Jiyoung Lim, Kijoon Chae
- 2. Aggregate Signature-Based Efficient Attributes Proof with Pairing-Based Anonymous Credential
 - Nan Guo, Jianju Cheng, Bin Zhang, Kangbin Yim
- 3. Detecting Anomaly Teletraffic Using Stochastic Self-Similarity Based on Hadoop Jongsuk R. Lee, Sang-Kug Ye, Hae-Duck J. Jeong

12:10-13:00 Lunch Break

13:00-13:55 Single Session

Keynote I

Keynote Speaker: Ivan Stojmenovic

13:55-14:05 Coffee Break

14:05-15:00 Single Session

Keynote II

Keynote Speaker: David Taniar

15:00-15:10 Coffee Break

15:10-16:40 Parallel Sessions

NBiS-S3: Mobile Computing - HALL D

Chair: David Taniar, Monash University, Australia

- 1. MANET Approaches for Airborne Networks: A Survey Elis Kulla, Shinji Sakamoto, Makoto Ikeda, Leonard Barolli
- 2. Towards the New Era of Global Aviation Electronic Data Exchange: Ensuring Completeness, Consistency and Quality in Data Migration

 Florian Puersch, Wenny Rahayu, Torab Torabi, Laura Irina Rusu, Karl Reed, Andrew Taylor-Harris
- 3. The Convergence of Big Data and Mobile Computing

 Agustinus Borgy Waluyo, David Taniar, Bala Srinivasan
- 4. Persuasive Strength Analysis of the Mobile Gang of Four: Toward Understanding Mobile Business Engineering in the Era of Mobile Persuasion

 Toshihiko Yamakami

DEMoC-S1: Database and Data Management Mobile Computing - HALL E

Chair: Yusuke Gotoh, Okayama University, Japan

- 1. A Scheduling Method for Division Based Broadcasting Considering Dynamic Update Yusuke Gotoh, Hideo Taniquchi
- 2. Evaluations on Playback Interruption Control for Broadcast and Communication Integrated Video-on-Demand Systems

 Tomoki Yoshihisa, Shojiro Nishio

3. Querying MongoDB with LINQ in a Server-Side JavaScript Environment Kousuke Nakabasami, Toshiyuki Amagasa, Hiroyuki Kitagawa

4. A User Recognition Method Using Accelerometer for Electric Appliances

Tsutomu Terada, Ryota Watanabe, Masahiko Tsukamoto

16:40-16:50 Coffee Break

16:50-18:20 Parallel Sessions

NBiS-S4: Security and Privacy - HALL D

Chair: Hiroaki Kikuchi, Meiji University, Japan

- 1. A Proposal for the Deterrence of Information Leakage Using Anti-virus Software

 Takuya Kaneko, Takumi Nagaya, Keisuke Takemori, Yutaka Miyake, Masakatsu Nishigaki
- 2. An Efficient Algorithm for Incremental Privacy Breach on (k, e)-Anonymous Model Bowonsak Seisungsittisunti, Juggapong Natwichai
- 3. Construction of a Multi-domain Functional Encryption System on Functional Information Infrastructure

 Yusuke Niwa, Akira Kanaoka, Eiji Okamoto

DEMoC-S2: Operating Systems - HALL E

Chair: Tomoki Yoshihisa, Osaka University, Japan

- 1. Evaluation of Dynamic Running Mode Switch Mechanism by Presence of OS Protection Kazutoshi Yokoyama, Hiroki Kumon, Hideo Taniguchi
- 2. Evaluation of Load Balancing in Multicore Processor for AnT Takeshi Sakoda, Toshihiro Yamauchi, Hideo Taniquchi
- 3. Memory Segmentation and Transfer in Mint Operating System Kiyohito Miyazaki, Yoshinari Nomura, Hideo Taniquchi

19:10-21:00 Welcome Reception Party

Thursday, September 5, 2013

08:30-09:00 Registration

09:00-10:30 Parallel Sessions

NBiS-S5: Cloud Computing - HALL C

Chair: Minoru Uehara, Toyo University, Japan

- 1. Healthcare Based on Cloud Computing
 Tamara Luarasi, Mimoza Durresi, Arjan Durresi
- 2. Utilizing Security Risk Approach in Managing Cloud Computing Services Danilo Valeros Bernardo
- 3. Targeted Advertisement Using Smartphones and Cloud Computing Mimoza Durresi, Tamara Luarasi, Indrit Baholli, Arjan Durresi
- 4. Federated Identity Access Broker Pattern for Cloud Computing Tim Reimer, Phil Abraham, Qing Tan
- 5. A Proposal of Privacy-Preserving Data Aggregation on the Cloud Computing

 Mebae Ushdia, Kouichi Itoh, Yoshinori Katayama, Fumihiko Kozakura, Hiroshi Tsuda

WSSM-S1: SNS - HALL D

Chair: Shusuke Okamoto, Seikei University, Japan

- 1. Effects of Side-Channel Communication: Text-Based Analyses of Chat Transcripts from a Case of Remote Education Using a Tele-conference System and a Social Networking System Jun Iio
- 2. A Social TV System for the Senior Community: Stimulating Elderly Communication Using Information and Communications Technology

 Masaru Miyazaki, Masanori Sano, Masahide Naemura, Hideki Sumiyoshi, Shigeaki Mitsuya,

 Arisa Fujii
- 3. System Design of Self-Actualization Support Service through Friendly Rivalry *Yoshihiro Kawano, Yuka Obu*
- 4. A Clustering Algorithm Using Twitter User Biography Masaki Kohana, Shusuke Okamoto, Masaya Kaneko

ISSE-S1: Intelligent Sensors and Smart Environments - HALL E

Chair: Hui-Huang Hsu, Tamkang University, Taiwan

1. Non-real Time Data Transmission Mechanism with Mobile Sink in Cluster-Based Wireless Sensor Networks

Kuo-Feng Huang, Yi-Hsun Lin, Shao-Wei Tsao, Ying-Hong Wang

2. Building Long-Distance Health Care Network Using Minimized Portable Sensors and Active Alert System

Chun-Che Shih, Kuang-Yi Chou, Huan-Chao Keh, Yuan-Cheng Cheng, Po-Yuan Yu, Nan-Ching Huang

- 3. Using Decision Tree to Analyze Patient of Aortic Aneurysm with Chronic Diseases in Clinical Application
 - Kuang-Yi Chou, Chun-Che Shih, Huan-Chao Keh, Po-Yuan Yu, Yuan-Cheng Cheng, Nan-Ching Huang
- 4. Using Kinect to Develop a Smart Meeting Room

 Hui-Huang Hsu, Yi Chiou, Yu-Ren Chen, Timothy K. Shih

10:30-10:40 Coffee Break

10:40-12:10 Parallel Sessions

NBiS-S6: P2P Systems Ad Hoc Networks - HALL C

Chair: Tomoya Enokido, Rissho University, Japan

- 1. Dynamic Clusters of Servers for Reducing Electric Power in P2P Overlay Networks Dilawaer Doulikun, Ailixier Aikebaier, Tomoya Enokido, Makoto Takizawa
- 2. A Fuzzy-Based System for Peer Reliability in JXTA-Overlay P2P Considering Number of Interactions
 - Evjola Spaho, Shinji Sakamoto, Leonard Barolli, Fatos Xhafa, Valbona Barolli, Jiro Iwashige
- 3. A Reputation Aggregation Method Considering File Request Distribution and Peer Behavior in Unstructured P2P Networks

 Hiroki Ushikubo, Sonoko Takeda, Hiroshi Shigeno
- 4. Jitter Considerations in On-Demand Route Discovery for Mobile Ad Hoc Networks Jiazi Yi, Juan Antonio Cordero Fuertes, Thomas Clausen
- 5. MANET Viewer III: 3D Visualization System for Mobile Ad Hoc Networks Akihiro Inoue, Yuma Takahashi, Akio Koyama

WSSM-S2: Social IT Tools - HALL D

Chair: Shusuke Okamoto, Seikei University, Japan

- 1. A Dynamic Bus Guide Based on Real-Time Bus Locations: A Demonstration Plan Ikuko Shigihara, Akiko Arai, Osamu Saitou, Yuji Kuwahara, Masaru Kamada
- 2. Consideration of IT Which Solves an Agricultural Problem: Examination of the Solution of an Agricultural Problem Which Utilized the Agricultural Support System Tadashi Okada, Jun Iio, Mayumi Nakada, Yuka Obu, Tatsuhiro Yonekura
- 3. Real-Time Water Level Visualization with Pervasive IC Sensors
 Osamu Saitou, Yuji Kuwahara, Michitoshi Niibori, Masaru Kamada

HETNET-S1: Network Applications - HALL E

Chair: Fatos Xhafa, Technical University of Catalonia, Spain

- 1. Context and the Cloud: Situational Awareness in Mobile Systems *Philip Moore, Mak Sharma, Fatos Xhafa, Leonard Barolli*
- 2. The Impact of LPN on Positioning Technology in LTE-A Systems Yuanfeng Du, Dongkai Yang, Dengkun Xiao
- 3. ECIS, an Energy Conservation and Interconnection Scheme between WSN and Internet Based on the 6 LoWPAN

Quan Yuan, Runtong Zhang, Fuzhi Chu, Wei Dai

4. Dynamic High Performance Service Resources Management Jonathan Liu, Wei Dai

12:10-13:30 Lunch Break

13:30-14:30 Single Session

Keynote III

Keynote Speaker: Victor Leung

14:30-14:40 Coffee Break

14:40-16:10 Parallel Sessions

NBiS-S7: Wireless Sensor and Mesh Networks - HALL C

Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan

- 1. Exploratory Coverage in Limited Mobility Sensor Networks $Mark\ Snyder,\ Sriram\ Chellappan,\ Mayur\ Thakur$
- 2. Performance Comparison of Moving Sensors and Sink with Static Sink in WSNs Leonard Barolli, Tao Yang, Elis Kulla, Shinji Sakamoto, Gjergji Mino
- 3. Performance Evaluation of Mesh Router Node Placement Using Simulated Annealing Considering Exponential and Weibull Distributions

 Shinji Sakamoto, Tetsuya Oda, Elis Kulla, Evjola Spaho, Leonard Barolli
- 4. A Comparison Study of GA and HC for Mesh Router Node Placement in Wireless Mesh Networks
 - Tetsuya Oda, Xinyue Chang, Shinji Sakamoto, Evjola Spaho, Fatos Xhafa, Leonard Barolli
- 5. Effects of Receiver Initiated MAC Protocol for Reducing Power Consumption in Wireless Sensor Networks

Hitomi Date, Tetsuya Shiqeyasu

WSSM-S3: Development Tools - HALL D

Chair: Shusuke Okamoto, Seikei University, Japan

- 1. A Parallelization of Interactive Animation Software with Web Workers

 Yuta Watanabe, Shusuke Okamoto, Masaki Kohana, Masaru Kamada, Tatsuhiro Yonekura
- Web-Based Tool for Programming Interactive 3D Animations in Terms of State-Transition Diagrams
 Dandy Ling Kwong, Michitoshi Niibori, Shusuke Okamoto, Masaru Kamada, Tatsuhiro Yonekura
- 3. A Web-Based Platform for Clients and Designers to Prototype Web Sites

 Tsukasa Soutome, Dandy Kwong Ling, Michitoshi Niibori, Masaru Kamada

HETNET-S2: Heterogeneous Networking and Environments - HALL E

Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan

- 1. Concurrent Intelligent Integration and Optimisation Engine for Supply Chains Management Paul Moynihan, Wei Dai
- 2. Workflow-Based Composite Job Scheduling for Decentralized Distributed Systems Nasi Tantitharanukul, Juggapong Natwichai, Pruet Boonma
- 3. An Improved Identity Authentication Scheme for Internet of Things in Heterogeneous Networking Environments

 Fuzhi Chu, Runtong Zhang, Rongqian Ni, Wei Dai
- 4. A Lightweight Approach to Semantify Saudi Open Government Data Hend S. Al-Khalifa

16:10-16:20 Coffee Break

16:20-17:50 Parallel Sessions

NBiS-S8: Wireless Network Applications - HALL C

Chair: Noriki Uchida, Saitama Institute of Technology

- 1. Delay Tolerant Network with Directional Antenna Control for Disaster Information System Noriki Uchida, Norihiro Kawamura, Yoshitaka Shibata
- 2. A Novel MMSE Based Predictive Method for Narrow Band Interference Removal Neeraj Varshney, Roop C. Jain
- 3. A Fast Adaptation Scheme for TFRC over Vertical Handovers Dagang Li, Wenpeng Sha
- 4. Location Estimation Considering Inside and Outside Wireless LAN Coverage Area Akinori Suzuki, Hiroko Shindo, Hiroshi Shigeno

MCCTA-S1: Mobile Cloud Computing Technologies and Applications - HALL D Chair: Hwa-Young Jeong, University of Kyung Hee, Korea

- 1. The Practical Quality Model for Embedded System and Software ${\it Hwa-Young\ Jeong}$
- 2. Service Based User Oriented Adaptive Learning System

 Hwa-Young Jeong, Jong-Hyuk Park
- 3. Application for Mobile Cloud Learning Jae Dong Lee, Jong-Hyuk Park
- 4. Development of Smart Mobile App Assessment Model Hyeyeon Kim, Jae Suhp Oh, Hyeong Nam Moon

INVITE-S1: Virtual Reality and Applications - HALL E

Chair: Yoshitaka Shibata, Iwate Prefectural University, Japan

- 1. Proposal of Disaster Management Support System Using Tiled Display Wall Environment Tomoyuki Ishida, Akira Sakuraba, Noriki Uchida, Yoshitaka Shibata
- 2. Tiled Display Environment to Realize GIS Based Disaster Information System
 Akira Sakuraba, Satoshi Nodas, Tomoyuki Ishida, Yasuo Ebara, Yoshitaka Shibata
- 3. An Experiment on Ultra-resolution Video Transmission with Tiled Display Wall in Wide-Area Network

 Yasuo Ebara, Satoshi Noda, Akira Sakuraba, Yoshitaka Shibata
- 4. Building Efficient Questionnaire Survey of Video Contents with Different QoS Parameters Kaoru Sugita, Masao Yokota
- 5. Evaluation of High Presence Sensation Based on Biological Information Tetsuro Ogi, Yosuke Kubota, Tetsuya Toma, Takeshi Chikakiyo

19:00-21:00 Banquet Party

Friday, September 6, 2013

08:30-09:00 Opening

09:00-10:30 Parallel Sessions

ITIS-S1: Innovative Services and Systems - HALL D

Chair: Minoru Uehara, Toyo University, Japan

- 1. Rapid Deployment for Machine Learning in Educational Cloud Yuichiro Takabe, Minoru Uehara
- 2. Proposal for BYOD Based Virtual PC Room *Minoru Uehara*
- 3. Implementation of Web-Based Interactive Interface as Software Execution Environment *Hideaki Yanagisawa, Kayo Kondo*
- 4. A Proposal and Evaluation of Access Point Allocation Algorithm for Wireless Mesh Networks Takuma Hoshi, Yuki Kumata, Akio Koyama

ADPNA-S1: Distributed and Parallel Network Applications - HALL E

Chair: Tomoya Enokido, Rissho University, Japan

- 1. Internal Filtering Approach toward Efficiency Optimization of Matching Large Scale XML Schemas Ahmad Abdullah Alqarni, Eric Pardede
- 2. A Routing Protocol Based on Power Generation Pattern of Sensor Node in Energy Harvesting Wireless Sensor Networks

Kazuyasu Kawashima, Fumiaki Sato

- 3. Experimentation of Group Communication Protocols

 Dilawaer Doulikun, Ailixier Aikebaier, Tomoya Enokido, Makoto Takizawa
- 4. Coordination in Android Mobile Teams
 Fatos Xhafa, Daniel Palou, Leonard Barolli, Evjola Spaho, Makoto Takizawa

10:30-10:40 Opening

10:40-12:10 Parallel Sessions

TwC-S1: Network Security Algorithms - HALL D

Chair: Hiroaki Kikuchi, Meiji University, Japan

- 1. A Smaller Final Exponentiation for Tate and Ate Pairings with Barreto-Naehrig Curve Yuki Kono, Taichi Sumo, Yasuyuki Nogami
- 2. Faster Scalar Multiplication for Elliptic Curve Cryptosystems Yumi Sakemi, Tetsuya Izu, Masaaki Shirase
- 3. An Improved Addition Formula on Elliptic Curves Given by Weierstrass Normal Form Masaaki Shirase
- 4. Location Privacy Vulnerable from Bluetooth Devices Hiroaki Kikuchi, Takeru Yokomizo
- 5. A Fast $(2, 2^m)$ -Threshold Secret Sharing Scheme Using m Linearly Independent Binary Vectors $Yuji\ Suga$
- 6. Marking Intrusion of Transaction-Based Applications in Wireless Storage Area Network $Syrine\ Chatti,\ Habib\ Ounelli$

INWC-S1: Performance Analysis of Communication Systems - HALL E Chair: Makoto Ikeda, Fukuoka Institute of Technology, Japan

- 1. Performance Analysis of User Connectivity by Optimizing Placement of Wireless Access Points Taiki Honda, Makoto Ikeda, Leonard Barolli
- 2. An Analytic Procedure to Generate Inhomogeneous Random Rough Surface
 Kazunori Uchida, Masafumi Takematsu, Jun-Hyuck Lee, Keisuke Shigetomi, Junichi Honda
- 3. Investigation of Diffracted Waves between Parallel and Arbitrary Angle of Edges: A Comparison Study
 - Jiro Iwashige, Leonard Barolli, Motohiko Iwaida, Saki Kameyama
- 4. Numerical and Experimental Study on Y-Shaped Branch Waveguide by Post Wall Hiroshi Maeda, Kiyotoshi Yasumoto, Huili Chen, Kazuya Tomiura, Daichi Ogata
- 5. Investigation of Scattered H-Wave Based on DRTM Masafumi Takematsu, Kazunori Uchida, Junichi Honda