



PROGRAM GUIDE

IEEE AINA 2014

The 28th IEEE International Conference on
Advanced Information Networking and Applications



May 13th - May 16th, 2014
Victoria, CANADA

Sponsored by:
IEEE Technical Committee on Distributed Processing (TCDP)



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Makoto Takizawa, Hosei University, Japan

Leonard Barolli, Fukuoka Institute of Technology, Japan

Message from IEEE AINA 2014 General Co-Chairs

It is our great pleasure to welcome you all at the 28-th IEEE International Conference on Advanced Information Networking and Applications (IEEE AINA 2014). The conference will be held at University of Victoria, Victoria, Canada from May 13 to May 16, 2014.

IEEE AINA International Conference is a forum for sharing ideas and research work in the emerging areas of information networking and their applications. The area of advanced networking has grown very rapidly and the applications around it have experienced an explosive growth especially in the area of pervasive and mobile applications, multimedia computing and social networking, semantic collaborative systems, as well as Grid, P2P and Cloud Computing. This advanced networking revolution is transforming the way people live, work, and interact with each other, and is impacting the way business, education, entertainment, and health care are operating. The papers included in the proceedings covers theory, design and application of computer networks, distributed computing and information systems.

Each year AINA has received high submission from all around the world, and maintained high quality accepted papers as it aspires to be one of the main international conferences on the Information Networking in the world. In conjunction with the IEEE AINA 2014 conference, there are 17 workshops, which also accepted high quality papers.

An international conference of this size requires the support and help of many people. A lot of people have helped and worked hard to produce a successful IEEE AINA 2014 technical program and conference proceedings. First, we would like to thank all authors for submitting their papers, the session chairs and distinguished keynote speakers. 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. Makoto Takizawa and Prof. Leonard Barolli, Co-Chairs of the Steering Committee for their strong encouragement, guidance and insights, and for spending a lot of energy for conference organization and shaping the conference program. We would like to thank Dr. Alex Thomo, University of Victoria, Canada, Dr. Takahiro Hara, Osaka University, Japan, Dr. Muhammad Younas, Oxford Brookes University, UK and Prof. Wenny Rahayu, La Trobe University, Australia for their great work as PC Co-Chairs. We would like to give our thanks also to Workshops Co-Chairs Prof. Fatos Xhafa, Technical University of Catalonia, Spain, Prof. Shengrui Wang, University of Sherbrooke, Canada, Prof. Hui-Huang Hsu, Tamkang University, Taiwan and Dr. David Taniar, Monash University, Australia.

Our special thanks go to Dr. Makoto Ikeda, Dr. Elis Kulla and Dr. Evjola Spaho, Fukuoka Institute of Technology, Japan for maintaining the conference Web site and the administration of paper submission and review process.

Finally, we would like to thank the Local Arrangement Chairs for their great support and help and for making excellent local arrangement for the conference.

We hope you will enjoy the conference and have a great time in Victoria, Canada.

IEEE AINA 2014 General Co-Chairs

Kin Fun Li, University of Victoria, Canada

Tomoya Enokido, Risho University, Japan

Jong Hyuk Park, Seoul National University of Science and Technology, Korea

Antonio Gentile, University of Palermo, Italy

Message from IEEE AINA 2014 Program Committee Co-Chairs

Welcome to the 28th IEEE International Conference on Advanced Information Networking and Applications (IEEE AINA 2014), which will be held at University of Victoria, Victoria, Canada from May 13 to May 16, 2014.

The purpose of the AINA conference is to bring together researchers, developers, and industrial experts to share new ideas and recent research results in the emerging areas of information networking and their applications. Nowadays, networks are going through a rapid evolution. The papers included in the proceedings cover all aspects of theory, design, and application of computer networks and distributed computing systems. Most of the papers deal with new trends in information networking, such as wireless sensor networks, ad-hoc networks, cloud computing, peer-to-peer systems, grid computing, pervasive and ubiquitous systems, multimedia systems, security, multi-agent systems, high-speed networks, and web-based systems.

This edition of AINA received 583 paper submissions from all over the world. Each submission was peer-reviewed by program committee members or invited external reviewers. Finally, the program committee accepted 154 papers (about 26% acceptance ratio), which will be presented during the conference days. Unfortunately, many interesting and good papers could not be accepted in IEEE AINA 2014 due to the limited number of time slots allocated for presentations at the conference.

We are very proud and honored to have two distinguished keynote talks: one by Prof. Shojiro Nishio, Osaka University, Japan, and the second by Prof. Victor C.M. Leung, The University of British Columbia, Canada. They will present their recent work and will give new insights and ideas to the conference participants.

Organizing an international conference of this size is of course a team effort. Therefore, we gladly admit that we had the help of many very professional people. First of all, we would like to thank all the authors for their interesting contributions since they shape the program and make it interesting for the audience. Moreover, we would like to express our thankfulness to all program-vice chairs for their great efforts. Additionally, we would like to thank all program committee members and reviewers who carried out the most important work to evaluate the submitted papers. We also thank the workshops chairs Prof. Fatos Xhafa, Technical University of Catalonia, Spain, Prof. Shengrui Wang, University of Sherbrooke, Canada, Prof. Hui-Huang Hsu, Tamkang University, Taiwan and Dr. David Taniar, Monash University, Australia for organizing many excellent workshops and symposiums, which enrich the conference and provide additional opportunities for discussions and future co-operations.

The great success of the AINA conference series would not be possible without the enormous commitment and support of the steering committee co-chairs Prof. Makoto Takizawa and Prof. Leonard Barolli. Therefore, we would like to thank them for their strong encouragement and guidance.

The general coordination of an event such as AINA conference requires a lot of coordination effort as well as many other activities related to the conference organization. Here, we thank the general co-chairs Dr. Kin Fun Li, University of Victoria, Canada, Prof. Tomoya Enokido, Risho University, Japan, Prof. Jong Hyuk Park, Seoul National University of Science and Technology, Korea, and Dr. Antonio Gentile, University of Palermo, Italy for their great support and invaluable suggestions. We give special thanks to Dr. Makoto Ikeda for his great efforts and efficient work to deal with many conference matters.

We hope you will enjoy the conference and readings and have a great time in Victoria, Canada.

IEEE AINA 2014 Program Committee Co-Chairs

Alex Thomo, University of Victoria, Canada
Takahiro Hara, Osaka University, Japan
Muhammad Younas, Oxford Brookes University, UK
Wenny Rahayu, La Trobe University, Australia

Message from IEEE AINA 2014 Steering Committee Co-Chairs

Welcome to the 28th IEEE International Conference on Advanced Information Networking and Applications (IEEE AINA 2014). It is our great pleasure and honor to hold AINA 2014 at the University of Victoria, Victoria, Canada from May 13 to May 16, 2014. On behalf of the AINA Steering Committee and the IEEE AINA 2014 Organizing Committee, we would like to express to all participants our cordial welcome and high respect.

AINA is an international forum, where scientists and researchers from academia and industry working in various scientific and technical areas of networking and distributed computing systems can demonstrate new ideas and solutions in distributed computing systems.

AINA was born in Asia, but it is now an international conference with high quality thanks to the great help and cooperation of many friendly international volunteers. AINA is a very open society and always welcomes international volunteers from any country and any area in the world. AINA is an international conference sponsored by the TCDP of IEEE Computer Society.

In conjunction with the AINA main conference, we have also 17 International workshops. Every year after the conference, AINA usually publishes special issues in international journals. The authors who attend AINA and present their papers in the main conference and workshops can submit a revised version of the paper to one of the special issues.

An international conference can be organized by support and great voluntary efforts of many people and organizations and our main responsibility is to coordinate various tasks carried out with other willing and talented volunteers.

We would like to thank IEEE AINA 2014 General Co-Chairs Dr. Kin Fun Li, University of Victoria, Canada, Prof. Tomoya Enokido, Ritssho University, Japan, Prof. Jong Hyuk Park, Seoul National University of Science and Technology, Korea, and Dr. Antonio Gentile, University of Palermo, Italy for their great efforts to make a very successful organization of IEEE AINA 2014.

We would like to express our special thanks to Dr. Alex Thomo, University of Victoria, Canada, Dr. Takahiro Hara, Osaka University, Japan, Dr. Muhammad Younas, Oxford Brookes University, UK and Prof. Wenny Rahayu, La Trobe University, Australia as PC Co-Chairs of IEEE AINA-2014 for making excellent technical program.

We greatly appreciate Prof. Fatos Xhafa, Technical University of Catalonia, Spain, Prof. Shengrui Wang, University of Sherbrooke, Canada, Prof. Hui-Huang Hsu, Tamkang University, Taiwan and Dr. David Taniar, Monash University, Australia as IEEE AINA 2014 Workshops Co-Chairs for organizing 17 workshops in conjunction with IEEE AINA 2014. Especially, we have special thanks to Prof. Fatos Xhafa for his leading role and efforts to invite many successful workshops.

We would like to thank also all track area chairs, program committee members, workshops organizers and workshops committee members for carefully reviewing the papers.

We have special thanks to Dr. Makoto Ikeda, Dr. Elis Kulla and Dr. Evjola Spaho, Fukuoka Institute of Technology, Japan as Web administrators.

We would like to take this opportunity to thank all members of the organization committee and program committee as well as all the reviewers for their hard work to make the reviews on time and authors for submitting the papers.

We would like to give special thanks to the IEEE Computer Society TCDP, as Sponsor of IEEE AINA 2014.

Finally, we would like to thank the Local Arrangement Team at the University of Victoria, Canada for their support and for making excellent local arrangements for the conference.

We do hope that you will have a great time in Victoria, Canada.

IEEE AINA 2014 Steering Committee Co-Chairs

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

Message from IEEE AINA 2014 Workshops Co-Chairs

Welcome to the AINA-2014 workshops to be held in conjunction with the 28th IEEE International Conference on Advanced Information Networking and Applications, at University of Victoria, Victoria, Canada. The goal of AINA 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 information networks 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 AINA conference.

For this edition, the following 17 symposiums and workshops will be held with AINA-2014.

1. The 10th International Symposium on Frontiers of Information Systems and Network Applications (FINA 2014)
2. The 10th International Workshop on Heterogeneous Wireless Networks (HWISE 2014)
3. The 9th International Workshop on the Performance Analysis and Enhancement of Wireless Networks (PAEWN 2014)
4. The 8th International Symposium on Security and Multimodality in Pervasive Environment (SMPE 2014)
5. The 7th International Workshop on Information Technology for Innovative Services (ITIS 2014)
6. The 7th International Workshop on Data Management for Wireless and Pervasive Communications (DMWPC 2014)
7. The 7th International Symposium on Mining and Web (MAW 2014)
8. The 7th International Workshop on Bio and Intelligent Computing (BICom 2014)
9. The 7th International Workshop on Telecommunication Networking, Applications and Systems (TeNAS 2014)
10. The 6th International Workshop on Disaster and Emergency Information Network Systems (IWDENS 2014)
11. The 4th International Workshop on Protocols and Applications with Multi-Homing Support (PAMS 2014)
12. The 2nd International Workshop on Collaborative Enterprise Systems (COLLABES 2014)
13. The 2nd International Workshop on Informatics for Intelligent Context-Aware Enterprise Systems (ICAES 2014)
14. The 2nd International Workshop on Pervasive Internet of Things and Smart Cities (PITSaC 2014)
15. The 2nd International Workshop on Network Management and Monitoring (NetMM 2014)
16. The 1st International Workshop on Device Centric Cloud (DC2-2014)
17. The 1st International Workshop on Engineering Energy Efficient WSNs (EEEWSN-2014)

We would like to thank the community for their great response to IEEE AINA 2014 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. Makoto Takizawa and Prof. Leonard Barolli, the Steering Committee Chairs of IEEE AINA International Conference for their strong encouragement and guidance to organize the AINA 2014 workshops and symposiums. We would like to thank IEEE AINA 2014 General Co-Chairs Dr. Kin Fun Li, University of Victoria, Canada, Prof. Tomoya Enokido, Rissho University, Japan, Prof. Jong Hyuk Park, Seoul National University of Science and Technology, Korea, and Dr. Antonio Gentile, University of Palermo, Italy for their advices to make possible organization of IEEE AINA 2014 workshops and symposiums. We are thankful to IEEE AINA 2014 Program Co-Chairs Dr. Alex Thomo, University of Victoria, Canada, Dr. Takahiro Hara, Osaka University, Japan, Dr. Muhammad Younas, Oxford Brookes University, UK and Prof. Wenny Rahayu, La Trobe University, Australia for their support and help to prepare the technical program of AINA 2014 workshops and symposiums. We would like to express special thanks to Dr. Makoto Ikeda, Dr. Elis Kulla, and Dr. Evjola Spaho for their timely unlimited support as web administrators.

We wish all of you an entertaining and rewarding experience in all workshops and the IEEE AINA 2014 International Conference.

IEEE AINA 2014 Workshops Co-Chairs

Fatos Xhafa, Technical University of Catalonia, Spain

Shengrui Wang, University of Sherbrooke, Canada

Hui-Huang Hsu, Tamkang University, Taiwan

David Taniar, Monash University, Australia

IEEE AINA 2014 Keynote I



Prof. Shojiro Nishio, Osaka University, Japan

Humanware: The Third Ware Which Creates Innovation in Information Technology

Abstract: Information technology has been developing remarkably in both hardware and software. People are now closely interconnected through information networks which together form a complex and dynamic supra network. One urgent challenge in this rapidly changing information society is the development of an entirely new concept: “humanware,” which is considered the third ware complementing hardware and software technologies. It addresses the flows of information linking humans and the resulting transformation of human relationships. To acquire skills related to humanware, it is essential to understand the “information dynamics” required to construct an information society attuned to both humans and the environment. It is also necessary to understand “cognitive dynamics,” the dynamics of higher brain functions for receiving, understanding, and generating information, as well as “biological dynamics,” the dynamics of biological systems to adapt to people and the environment. In this talk, I first discuss the importance of humanware for creating innovation in information technology, and then introduce our ongoing Humanware Innovation Program supported by the Program for Leading Graduate Schools of the MEXT (the Ministry of Education, Culture, Sports, Science and Technology in Japan). This program aims at fostering leaders to construct flexible, robust, and sustainable systems that support an ever-changing social environment based on the concept of humanware.

IEEE AINA 2014 Keynote II



Prof. Victor C.M. Leung, The University of British Columbia, Canada

Video Game as a Service – Cloud Computing Enabled Video Gaming Anywhere on Any Device

Abstract: There is a growing demand by consumers to access their digital entertainments, which are increasingly cloud-based, whenever and wherever they have access to networks of diverse characteristics, and using whatever devices they have in their hands. To address this diversity, we have embarked on a project is to develop design methodologies and enabling technologies to support “play anywhere on any device, pause and resume on any device” capabilities in next-generation cloud-based video games. In particular, scalable and ubiquitous computing resources in the cloud can enable sophisticated video games to be played on mobile devices that have limited processing and storage capacities. In this talk, we start with an overview of the general characteristics of mobile cloud computing and related research issues. We propose a cloud-based video game system with cooperative video sharing over a secondary ad hoc wireless network. Experimental results show that the expected server transmission rate can be significantly reduced compared to the conventional video encoding schemes for cloud games. We conclude with a discussion on our ongoing research to develop a cognitive framework that will provide “video game as a service” to players using a variety of devices to access computer games in the cloud over different wireless and wireline networks with diverse quality of service characteristics.



IEEE AINA 2014 Main Conference and Workshops Program

Tuesday, May 13, 2014

AINA Steering Committee Meeting and Discussion

Wednesday, May 14, 2014

08:00 Registration

09:00-10:30 Single Session: Opening and Keynote I

IEEE AINA 2014 Keynote Talk I (PLENARY ROOM)

Prof. Shojiro Nishio: Humanware: The Third Ware Which Creates Innovation in Information Technology

Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan

10:30-11:00 Coffee Break

11:00-12:30 Parallel Sessions

AINA-S1: Communications Network and Protocols I - Room 1**Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan**

1. Delay Asymmetry Correction Model for Master-Slave Synchronization Protocols
Md. Arifur Rahman, Thomas Kunz, Howard Schwartz
2. From Self-Regulate to Admission Control in Real-Time Traffic Environment
Hengky Susanto, Byung-Guk Kim
3. End-to-end measurement of hop-by-hop available bandwidth
Kazumasa Koitani, Go Hasegawa, Masayuki Murata
4. An Analytical View of Multiple CDNs Collaboration
Moises Rodrigues, Stenio Fernandes, Judith Kelner, Djamel Hadj Sadok

AINA-S2: Ad-Hoc Networks I - Room 2**Chair: Makoto Ikeda, Fukuoka Institute of Technology, Japan**

1. PUSH: Proactive Unified Spectrum Handoff in CR-MANETs
Samad Nejatian, Sharifah K. Syed-Yusof, Nurul Mu'azzah Abdul Latiff, Vahid Asadpour
2. An Imperialist Competitive Algorithm For Interference-Aware Cluster-heads Selection in Ad hoc Networks
Mahboobeh Parsapoor
3. Dynamic Hierarchical Trust Management of Mobile Groups and Its Application to Misbehaving Node Detection
Ing-Ray Chen, Jia Guo
4. Available-Bandwidth-based Routing in IEEE 802.15.4-based Ad-hoc Networks: Proactive vs. Opportunistic Technique
Muhammad Omer Farooq, Thomas Kunz

AINA-S3: Mobile and Wireless Networks I - Room 3**Chair: Kin Fun Li, University of Victoria, Canada**

1. Cooperative Mobile Live Streaming Considering Neighbor Reception
Sho Hatakeyama, Yoshiki Sakata, Hiroshi Shigeno
2. Node Position Forecast in MANET with PheroCast
Paulo Coelho, Enrique Fynn, Luis Faina, Rafael Pasquini, Lasaro Camargos
3. USABLE - A communication framework for ubiquitous systems
Marcio Maia, Rossana Maria de Castro Andrade, Carlos Alberto de Queiroz Filho, Reinaldo Bezerra Braga, Saulo Aguiar, Rute Nogueira, Bruno Gois, Fredrik Toorn
4. A Personalized Learning System with an Augmented Reality Browser for Ecosystem Fieldwork
Masato Kasahara, Kosuke Takano, Kin Fun Li

AINA-S4: Security and Privacy I - Room 4**Chair: Fatos Xhafa, Technical University of Catalonia, Spain**

1. A New Efficient and Secure POR Scheme Based on Network Coding
Kazumasa Omote, Thao Tran
2. Toward a Framework for Continuous Authentication using Stylometry
Marcelo Luiz Brocardo, Issa Traore, Isaac Woungang
3. Protecting Run-time Filters for Network Intrusion Detection Systems
Victor C. Valgenti, Hai Sun, Min S Kim
4. Security in Online Learning Assessments: Towards an Effective Trustworthiness Approach to Support e-Learning Teams
Jorge Miguel, Santi Caballé, Fatos Xhafa, Josep Prieto

W-BICOM-S1: Intelligent Algorithms and Systems - Room 5**Chair: Carson K. Leung, University of Manitoba, Canada**

1. Distributed Uncertain Data Mining for Aggregate Frequent Patterns
Carson K. Leung
2. Botnet Behaviour Analysis using IP Flows On effect of flow exporter tools and protocol filters
Fariba Haddadi, Nur Zincir-Heywood
3. Efficient Critical System Event Recognition and Prediction for Virtualization-based Cluster System
Yuanyao Liu, Zhengping Wu

W-DMWPC-S1: Data Management and Communication Protocol - Room 6**Chair: Akimitsu Kanzaki, Shimane University, Japan**

1. A First Look at Caching during TIP-tree Navigation for Location Based Services
Wendy K Osborn
2. Routing method based on relationship between neighboring nodes in WMNs
Wataru Kobayashi and Kazunori Ueda
3. Energy-Efficient Data Gathering using Sleep Scheduling and Spatio-Temporal Interpolation in Wireless Sensor Networks
Akimitsu Kanzaki, Shinya Kondo, Takahiro Hara, and Shojiro Nishio

W-FINA-S1: Security and Intrusion Detection Systems - Room 7**Chair: Hiroaki Kikuchi, Meiji University, Japan**

1. Protection Against Web 2.0 Client-side Web Attacks using Information Flow Control
Bassam Sayed, Issa Traore
2. E-voting Attacks and Countermeasures
M. Tarek Ibn Ziad, Amr Al-Anwar, Yousra Alkabani, Watheq El-Kharashi, Hassan Bedour
3. Securing Optical Network Access with Post-Switching Coding Scheme of Signatures Reconfiguration
Jen-Fa Huang, Kai-Sheng Chen, Sheng-Hui Meng, Ying-Chen Lin
4. A S/Key-like One-Time Password Authentication Scheme Using Smart Cards for Smart Meter
Wei-Bin Lee, Tzung-Her Chen, Wei-Rung Sun, Kevin Ho

W-EEEWSN-S1: Wireless Sensor Networks - Room 8**Chair: Juan Carlos Augusto, Middlesex University, UK**

1. Deployment Challenges and Developments in Wireless Sensor Networks Clustering
Krishna Doddapaneni, Fredrick Omondi, Enver Ever, Purav Shah, Orhan Gemikonakli and Roberto Gagliardi
2. On demand Multicast Routing in Wireless Sensor Networks
Clifford Sule, Purav Shah, Krishna Doddapaneni, Orhan Gemikonakli and Enver Ever
3. Intelligent Evaluation Models based on the Single-hop Protocol in Wireless Sensor Networks
Ning Cao, Russell Higgs, and Gregory O'Hare

W-COLLABES-S1: Trust Coputing and Social Networking - Room 9**Chair: Tomoya Enokido, Rissho University, Japan**

1. Building a Confident Advanced Email System using a new Correspondence Model
Laurent Cailleur; Ahmed Bouabdallah; Jean-Marie Bonnin
2. Effective Third Party Auditing in Cloud Computing
Mohammed Hussain; Mohamed Basel Almourad

3. Modeling User Interactions in Social Communication Networks with Variable Social Vector Clocks
Ta-Yuan Hsu; Ajay Kshemkalyani; Min Shen
4. e-butler: A User-centric High Reliability Personal Portal Site
Yoshio Kakizaki; Yoji Maeda; Hidekazu Tsuji

12:30-14:00 Lunch Break

14:00-15:30 Parallel Sessions

AINA-S5: Communications Network and Protocols II - Room 1

Chair: Irfan Awan, University of Bradford, UK

1. Innovating on Interdomain Routing with an Inter-SDN Component
Ricardo Bennessby, Edjard S. Mota, Paulo Fonseca, Alexandre Passito
2. An identifier-locator approach to host multihoming
Bruce Simpson, Saleem N Bhatti
3. Joint Allocation of Nodes and Links with Load Balancing in Network Virtualization
Andre Palhares, Marcelo Santos, Patricia Endo, Jonatas Vitalino, Moises Rodrigues, Glaucio Goncalves, Djamel Sadok, Azimeh Sefidcon, Fetahi Wuhib
4. An Analysis of the Impact of Out-Of-Order Recovery Algorithms on MPTCP Throughput
Amani Alheid, Dritan Kaleshi, Angela Doufexi

AINA-S6: Ad-Hoc Networks II - Room 2

Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan

1. CollabAssure: A Collaborative Market Based Data Service Assurance Framework For Mobile Devices
Bhanu Kaushik, Honggang Zhang, Xinyu Yang, Xinwen Fu, Benyuan Liu
2. Efficient Beacon-less Broadcasting in MANETs
Louisa Harutyunyan, Jaroslav Opatrny
3. FBMS: A Fuzzy-Based Multi-interface System for Cellular and Ad Hoc Networks
Elis Kulla, Gjergji Mino, Shinji Sakamoto, Makoto Ikeda, Santi Caballé, Leonard Barolli
4. HER-MAC: A Hybrid Efficient and Reliable MAC for Vehicular Ad hoc Networks
Duc Ngoc Minh Dang, Hanh Ngoc Dang, VanDung Nguyen, Zaw Htike, Choong Seon Hong

AINA-S7: Mobile and Wireless Networks II - Room 3

Chair: Stephen W Neville, University of Victoria, Canada

1. Application-Aware Fast Dormancy in LTE
Jacques Bou Abdo, Imad Sarji, Imad H Elhadj, Ali Chehab, Ayman Kayssi
2. Determining Per-mode Battery Usage within Non-trivial Mobile Device Apps
M. Abousaleh, D. Yarish, D. Arora, S.W. Neville, T.E. Darcie
3. Clock Synchronization in Mobile Ad Hoc Networks based on an Iterative Approximate Byzantine Consensus Protocol
Chuanyou Li, Yun Wang, Michel Hurfin
4. Annotation-based Access Control Approach for Ubiquitous Systems
Rhoney Benigno, Natan Pedrosa, Pedro Tom, Wesley Arajo, Jos R. Torres Neto, Eucassio Junior, Svio Mota, Jos B. Filho, Herv Martin

AINA-S8: Security and Privacy II - Room 4**Chair: Atsuko Miyaji, Japan Advanced Institute of Science and Technology, Japan**

1. Analyzing Cascading Failures in Smart Grids under Random and Targeted Attacks
Sushmita Ruj, Arindam Pal
2. A Spoofing Attack against a Cancelable Biometric Authentication Scheme
Tetsuya Izu, Yumi Sakemi, Masahiko Takenaka, Naoya Torii
3. New Condition for Hierarchical Secret Image Sharing Scheme
Angelina Espejel-Trujillo, Mariko Nakano-Miyatake, Hector Perez-Meana
4. RFID Path Authentication, Revisited
Mohammad Saiful Islam Mamun, Atsuko Miyaji

W-BICom-S2: Multimedia and Social Networking - Room 5**Chair: Noriki Uchida, Saitama Institute of Technology, Japan**

1. An Intelligent Touring System based on Mobile Social Network and Cloud Computing for Travel Recommendation
Yuan-Tse Yu, Chung-Ming Huang, Yun-Tz Lee
2. A Fast Efficient Fraction-Pixel Displacement for H.264/AVC Motion Compensation
Lung-Jen Wang, Chia-Tzu Shu
3. A Smart Environment and Heuristic Diagnostic Teaching Principle-based System for Supporting Children with Autism During Learning
Ardiana Sula, Evjola Spaho, Keita Matsuo, Leonard Barolli, Fatos Xhafa
4. Internet Traffic Engineering: Understanding the decision-making process for traffic management in South America
Marcio A Deus, Paulo Carvalho, Joao Leite

W-DMWPC-S2: Context Aware Systems and 9d Services - Room 6**Chair: Takahiro Hara, Osaka University, Japan**

1. Context-Aware Media Recommendations
Abayomi Moradeyo Otebolaku and Maria Teresa Andrade
2. A Menu-based Content Search System based on Relationships between Mobile User Context and Information Needs
Mayu Iwata, Hiroki Miyamoto, Takahiro Hara, Kentaro Shimatani, Tomohiro Mashita, Kiyoshi Kiyokawa, Shojiro Nishio, and Haruo Takemura
3. A 3DCG Distribution System with Personalized Ranking for Augmented Reality User Interface
Hiroshi Honda and Kosuke Takano

W-FINA-S2: Internet Computing and Web Applications - Room 7**Chair: Yuka Kato, Advanced Institute of Industrial Technology, Japan**

1. A Virtual Campus Tour Service using Mobile Robots
Yuka Kato
2. Thai Related Foreign Language-Specific Website Segment Crawler
Tanaphol Suebchua, Bundit Manaskasemsak, Arnon Rungsawang
3. Assessing energy efficiency in ISP and Web Search Engine collaboration
Nicolas Hidalgo, Erika Rosas, Graciela Veronica Gil-Costa, Mauricio Marin
4. Defining computational resources prices based on the expectations equilibrium of consumers and providers from a Desktop Grid
Lourival A. Gois, Eliana Ishikawa, Gabriel Casella

W-EEEWSN-S2: Network Applications - Room 8**Chair: Leonardo Mostarda, Camerino University, Italy**

1. An Ontology Driven Software Framework for the Healthcare Applications based on ANT+ Protocol
Nadeem Mehmood and Rosario Culmone
2. DA-DCT Data Aggregation using Discrete Cosine Transform in Wireless Sensor Network
Kideok Kwon, Hyunwoo Ju and Younghwan Yoo
3. Performance Evaluation of LTE network via using Fixed/Mobile Femtocells
Rand Raheem, Aboubaker Lasebae and Jonathan Loo

W-COLLABES-S2: Service Management and Context-Aware Systems - Room 9**Chair: Fatos Xhafa, Technical University of Catalonia, Spain**

1. Digital Convergence Services for Situation-aware POI Touring
Hao-Hsiang Ku; Si-Yuan Huang
2. Multi-Criteria Consensus-Based Service Selection Using Crowd-Sourcing
Mahdi Sharifi; Azizah Abdul Manaf; Amir Vahid Dastjerdi; Homa Movahednejad; Ali Memariani; Haslina Sarkan
3. Design of an Ad Hoc Mobile Communication App for Disaster Recovery
Allan Goncalves; Carlos Silva; Patricia A Morreale
4. ConExT-U: A Context-aware Exception Handling Mechanism for Task-Based Ubiquitous Systems
Carlos Alberto de Queiroz, Filho; Rossana Maria de Castro Andrade; Lincoln Rocha; Reinaldo Bezerra Braga; Carina Teixeira De Oliveira

15:30-16:00 Coffee Break**16:00-17:30 Parallel Sessions****AINA-S9: Communications Network and Protocols III - Room 1****Chair: Muhammad Younas, Oxford Brookes University, UK**

1. Transparent Multi-Hop Protocol Termination
Michael Karl, Thorsten Herfet
2. ASN-FWD: Shrinking the IPv4 Share on the Forwarding Information Base
Marta Lacerda, Marcos Siqueira, Paulo Coelho, Luis Faina, Lasaro Camargos, Christian Esteve Rothenberg, Rafael Pasquini
3. A Wi-Fi simulation model which supports channel scanning across multiple non-overlapping channels in NS3
Jason Ernst, Stefan Kremer, Joel J. P. C. Rodrigues
4. Congestion Control Scheme for Multimedia Streaming Service over High Bandwidth Delay Product Networks
Sunghee Lee, Kwangsue Chung

AINA-S10: Pervasive and Ubiquitous - Room 2**Chair: Jong Hyuk Park, Seoul National University of Science and Technology, Korea**

1. Processing Probabilistic K-Nearest Neighbor Query Using Rlsd-tree
Yuan-Ko Huang, Lien-Fa Lin

2. A Quality-Aware and Energy-Efficient Context Management Framework for Ubiquitous Systems
Vinicius Bezerra, Misael C. Junior, Olga Valeria, Constantino D. Neto, Liliam Leal, Marcus Lemos, Carlos G. Carvalho, Jose Bringel Filho, Raimir Holanda, Nazim Agoulmine
3. Optimizing Energy Consumption in Broker-Assisted Cyber Foraging Systems
Manjinder Nir, Ashraf Matrawy, Marc St-Hilaire
4. A Distributed Architecture for Supporting Context-Aware Applications in UbiComp
Joao Lopes, Rodrigo Souza, Ana Marilza Pernas, Adenauer Yamim, Claudio Geyer

AINA-S11: Mobile and Wireless Networks III - Room 3

Chair: Irfan Awan, University of Bradford, UK

1. Energy Usage of UDP and DCCP over 802.11n
Mamun Abu-Tair, Saleem N Bhatti
2. Adaptive Decision-Making Scheme for Cognitive Radio Networks
Ismail AlQerm, Basem Shihada
3. Performance Evaluation of Cognitive Radio Networks under Licensed and Unlicensed Spectrum Bands
Salah Zahed; Irfan Awan; Andrea Cullen; Muhammad Younas
4. Analysis of WMN-GA Simulation Results: WMN Performance Considering Stationary and Mobile Scenarios
Makoto Ikeda, Taiki Honda, Tetsuya Oda, Shinji Sakamoto, Leonard Barolli

AINA-S12: Security and Privacy III - Room 4

Chair: Hiroaki Kikuchi, Meiji University, Japan

1. A Scalable and Secure RFID Ownership Transfer Protocol
Mohammad Saiful Islam Mamun, Atsuko Miyaji
2. An Efficient and Transparent One-Time Authentication Protocol with Non-Interactive Key Scheduling and Update
Arcangelo Castiglione, Alfredo De Santis, Aniello Castiglione, Francesco Palmieri
3. Privacy-preserving Hypothesis Testing for the Analysis of Epidemiological Medical Data
Hiroaki Kikuchi, Tomoki Sato, Jun Sakuma
4. A Scalable Approach to Source Camera Identification over Hadoop
Giuseppe Cattaneo, Gianluca Roscigno, Umberto Ferraro Petrillo

W-BICOM-S3: Security and Privacy - Room 5

Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan

1. Distinguishing between Web Attacks and Vulnerability Scans based on Behavioral Characteristics
Katerina Goseva-Popstojanova, Ana Dimitrijevikj
2. A Heuristic-Based Co-clustering Algorithm for the Internet Traffic Classification
Wei Lu, Ling Xue
3. SSL Application for Managed Security between the Mobile and HIS Biometric Information Collection Client
Jae Pil Lee, Young Hyuk Kim, Il Kwon Lim, Jae Gwang Lee, Hyun Namgung, Jae Kwang Lee
4. Tracking and Abnormal Behavior Detection in Video Surveillance using Optical Flow and Neural Networks
Nida Rasheed, Shoab Khan, Adnan Khalid

W-DMWPC-S3: Special Session for Project Report on Efficient Data Processing Techniques for Mobile Sensor Networks - Room 6**Chair: Akimitsu Kanzaki, Shimane University, Japan**

1. Data Allocation Techniques for Mobile Sensor Networks
Takahiro Hara and Shojiro Nishio
2. Data Transmission Techniques for Mobile Sensor Networks
Tomoki Yoshihisa and Shojiro Nishio
3. Communication Techniques for Mobile Sensor Networks
Akimitsu Kanzaki and Shojiro Nishio

W-FINA-S3: Wireless and Mobile Networks - Room 7**Chair: Ayuman Kayssi, American University of Beirut, Lebanon**

1. Evaluation of Space-Time-Frequency (STF)-coded MIMO-OFDM Systems in Realistic Channel Models
Ricardo Kehrle Miranda, Joao Paulo Carvalho Lustosa da Costa, Marco Marinho, Edison Pignaton de Freitas, Rafael Timoteo de Sousa Junior
2. Seamless Handoff and Performance Anomaly Reduction Schemes based on OpenFlow Access Points
Won-Suk Kim, Sang-Hwa Chung, Chang-Woo Ahn, Mi-Rim Do
3. Co-Channel Interference Mitigation Using Control Information based on Location Information in LTE Femtocell Systems
Sok Chhorn, Seo Si-O, Mustafa Mohsini, Choong-Ho Cho, Seung-Wan Ryu, Hyong Woo Lee
4. DAIDS: An Architecture for Modular Mobile IDS
Alaa Salman, Imad H Elhadj, Ali Chehab, Ayman Kayssi

W-IWDENS-S1: Disaster Information System - Room 8**Chair: Yoshitaka Shibata, Iwate Prefectural University, Japan**

1. Lightweight Safety Confirmation System for Large-Scale Disaster
Hiroaki Yuze, Shinichi Nabeta, Masao Izumi
2. Construction of Integrated Safety Confirmation System Using the IC Card
Tomoyuki Ishida, Yoichiro Shimizu, Kazuhiro Takahagi, Akira Sakuraba, Noriki Uchida, Yoshitaka Shibata
3. Parallel Infrastructures and Systems for Near-Field Tsunami Detection and Impact Assessment
Yagiz Onat Yazir, Josh Erickson, Yvonne Coady
4. Disaster Management Projects using Wireless Sensor Networks: An Overview
Imane Benkhelifa, Nadia Nouali-Taboudjemat, Samira Moussaoui

W-DC2-S1: Device Centric Cloud I - Room 9**Chair: Soohong Daniel Park, Samsung Electronics, Korea**

1. VCPS: Vehicular Cyber-Physical Systems for Smart Road Services
Jaehoon Jeong, Eunseok Lee
2. UDP-DC2 User Data Processing Platform based on Device-Centric Cloud
Inchul Hwang, Sunhee Youm, Soohong Daniel Park, Hwajung Kim
3. Dynamic Edge-Caching for Mobile Users Minimising Inter-AS traffic by moving Cloud Services and VMs
Fragkiskos Sardis, Glenford E Mapp, Jonathan Loo, Mahdi Aiash

17:30-18:00 Coffee Break**18:00-19:30 Parallel Sessions****AINA-S13: Software Defined Networking and Software Engineering - Room 1****Chair: Markus Aleksy, ABB AG, Germany**

1. A Clustered SDN Architecture for Large Scale WSON
Manoel Camillo Penna, Edgard Jamhour, Marcio Miguel
2. Augmented Reality for Improved Service Delivery
Markus Aleksy, Elina Vartiainen, Veronika Domova, Martin Naedele
3. Periodic Control Update Overheads in OpenFlow-Based Enterprise Networks
Olatunde Awobuluyi
4. Towards SLA Policy Refinement for QoS Management in Software-Defined Networking
Cristian Cleder Machado, Lisandro Z Granville, Alberto E. Schaeffer-Filho, Juliano A Wickboldt
5. AgNOS: A Framework for Autonomous Control of Software-Defined Networks
Alexandre Passito, Edgard S. Mota, Ricardo Bennesby, Paulo Fonseca

AINA-S14: Wireless Sensor Networks I - Room 2**Chair: Umar Qasim, University of Alberta, Canada**

1. Priority-Based Multi-Event Reporting in Hybrid Wireless Sensor Networks
Israel Leyva-Mayorga, Mario E. Rivero-Angeles, Chadwick Carreto-Arellano
2. A Guaranteed Lifetime Protocol for Real-Time Wireless Sensor Networks
Babar Shah, Ki-Il Kim
3. Investigating Impact of ACK in Non-Beacon Enabled Slotted IEEE 802.15.4
D. Mahmood, K. Latif, N. Javaid, S.U. Qureshi, I. Ahmed, U. Qasim, Z.A. Khan
4. LAEEBA: Link Aware and Energy Efficient Scheme for Body Area Networks
S. Ahmed, N. Javaid, M. Akbar, A. Iqbal, Z.A. Khan, U. Qasim

AINA-S15: Mobile and Wireles Networks IV - Room 3**Chair: Jong Hyuk Park, Seoul National University of Science and Technology, Korea**

1. Efficient Hashing for Dynamic Per-Flow Network-Interface Selection
Paul A.S. Ward, Kshirasagar Naik, Jakub Schmidtke
2. Design and Implementation of Mobile Broadcast System
Agustinus Borgy Waluyo, Feng Zhu, David Taniar, Srinivasan Bala
3. Reverse Nearest Neighbour by Region on Mobile Devices
Kiki Maulana, David Taniar, Maria Indrawan, Dirda Muthi Latjuba
4. Faster Translated Binary Execution on Mobile System through Virtualization
Min Choi, Hyun-Woo Lee, Wonjae Lee, Jong Hyuk Park

AINA-S16: Security and Privacy IV - Room 4**Chair: Hsing-Chung Chen, Asia University, Taiwan**

1. Combating Insider Attacks in IEEE 802.11 Wireless Networks with Broadcast Encryption
Joseph Soryal, Irrippuge Milinda Perera, Ihab Darwish, Nelly Fazio, Rosario Gennaro, Tarek Saadawi

2. MARD: A Framework for Metamorphic Malware Analysis and Real-Time Detection
Shahid Alam, R. Nigel Horspool, Issa Traore
3. Channel Estimation for Secret Key Generation
Michael McGuire
4. A Rotation Session Key-based Transposition Cryptosystem Scheme on Mobile Text Chatting
Hsing-Chung Chen

W-BICOM-S4: Wireless and Mobile Networks - Room 5**Chair: Yuka Kato, Advanced Institute of Industrial Technology, Japan**

1. Combining Wireless Sensor Networks and Machine Learning for Flash Flood Nowcasting
Gustavo Furquim, Gustavo Pessin, Jo Ueyama, Maria Clara, Eduardo Mendiondo, Paulo de Souza, Desislava Dimitrova, Torsten Ingo Braun
2. Real-time Mobile Cloud Computing A Case Study in Face Recognition
Marwa Ayad, Ashraf M Salem
3. A Remote Control Method for Mobile Robots using Game Engines
Osamu Ohashi, Yuka Kato

W-ICAES-S1: Intelligent context-aware systems - Room 6**Chair: Philip Moore, Birmingham City University, UK**

1. Semantic Valence Modeling: Emotion Recognition and Affective States in Context-Aware Systems
Philip Moore, Fatos Xhafa, Leonard Barolli
2. Object-Oriented Context Modeling: Using Relational Data Structures
Jagdev Bhogal, Philip Moore
3. An Initial Analysis Of The Contextual Information Available Within Auction Posts
On Contract Cheating Agency Websites
Thomas Lancaster, Robert Clarke
4. Cultural Transformation to Support the Adoption of Green IT
William M. Campbell, Philip More, Mak Sharma

W-FINA-S4: Distributed and Parallel Systems - Room 7**Chair: Tomoya Enokido, Ritssho University, Japan**

1. Composing Thermostatically Controlled Loads to Determine the Reliability against Blackouts
Nils Henning Mullner, Oliver Theel, Martin Franzle
2. Distributed Line Outage Detection in Smart Grid
Liang Zhao, Wen-Zhan Song, Lang Tong, Yuan Wu
3. Data-driven Computer Go based on Hadoop
Kwangjin Hong, Keechul Jung
4. An approach for performance modelling and analysis of multi-tiers autonomic systems
Mehdi Sliem, Nabila Salmi, Malika Ioualalen
5. REST API Design Patterns for SDN Northbound API
Wei Zhou, Li Li, Min Luo, Wu Chou

W-IWDENS-S2: Disaster Information Networks - Room 8**Chair: Noriki Uchida, Saitama Institute of Technology, Japan**

1. Performance Evaluation of PC Router based Cognitive Wireless Network for Disaster-Resilient WANs
Goshi Sato, Noriki Uchida, Yoshitaka Shibata
2. A New Wireless Micro-balloon Network for Disaster Use
Yoshitaka Shibata, Sanetaka Arimoto, Yuji Ohashi, Noriki Uchida
3. Automotive Sensor Network Platform for Disaster Information System
Go Hirakawa, Phyu Phyu Kwe, Yoshitaka Shibata
4. Omnidirectional Video and sensor data Collection and Distribution System on Challenged Communication Environment
Kenta Ito, Go Hirakawa, Yoshitaka Shibata
5. Proposal of Dynamic FEC Controls with Population Estimation Methods for Delay Tolerant Networks
Noriki Uchida, Noritaka Kawamura, Kazuo Takahata, Yoshitaka Shibata

W-DC2-S2: Device Centric Cloud II - Room 9**Chair: Inchul Hwang, Samsung Electronics, Korea**

1. WF Web application Workload balancing Framework
Inchul Hwang, Jonggyu Ham
2. Investigating the Impact of Live Migration on the Network Infrastructure in Enterprise Environments
Mahdi Aiash, Jose Sinti, Fowzan Jiffry
3. Secure Live Virtual Machines Migration: Issues and Solutions
Mahdi Aiash, Glenford E Mapp, Orhan Gemikonakli
4. QoS-aware Packet Chunking Schemes for M2M Cloud Services
Anan Sawabe, Kazuya Tsukamoto, Yuji Oie

20:00-22:00 Welcome Reception Party

Thursday, May 15, 2014

08:00 Registration

09:00-10:30 Single Session: Keynote II (Plenary Room)

IEEE AINA 2014 Keynote Talk II

Prof. Victor C.M. Leung: Video Game as a Service – Cloud Computing Enabled Video Gaming Anywhere on Any Device

Chair: Kin Fun Li, University of Victoria, Canada

10:30-11:00 Coffee Break

11:00-12:30 Parallel Sessions

AINA-S17: Communications Network and Protocols V - Room 1

Chair: Ayman Kayssi, American University of Beirut, Lebanon

1. A Bandwidth-Feasibility Algorithm for Reliable Virtual Network Allocation
Rafael Gomes, Luiz F. Bittencourt, Edmundo Madeira
2. IP Spoofing Detection Using Modified Hop Count
Ayman Mukaddam, Imad H Elhajj, Ayman Kayssi, Ali Chehab
3. New Heuristic for Message Broadcasting in Networks
Hovhannes A Harutyunyan, Cosmin Jimborean
4. Conducting network research in large-scale platforms: Avoiding Pitfalls in PlanetLab
Marcelo Santos, Stenio Fernandes, Carlos A Kamienski

AINA-S18: Wireless Sensor Networks II - Room 2

Chair: Noriki Uchida, Saitama Institute of Technology, Japan

1. A Power Assignment Method for Multi-Sink WSN with Outage Probability Constraints
Marcelo E. Pellenz, Edgard Jamhour, Manoel C. Penna, Richard Demo Souza, Glauber Brante
2. Integration of Push-based and Pull-based Connectivity Status Sharing for Efficient Data Forwarding toward Mobile Sinks in Wireless Sensor Networks
Takeshi Yoshimura, Kazuya Matsuo, Akimitsu Kanzaki, Shojiro Nishio
3. HEX Clustering Protocol for Routing in Wireless Sensor Network
M. Liaqat, N. Javaid, M. Akbar, Z.A. Khan, L. Ali, S. Hafizah, A. Ghani
4. TRP: Tunneling Routing Protocol for WSNs
Mariam Akbar, Nadeem Javaid, Sidrah Yousaf, Ayesha Hussain Khan, Zahoora A Khan, Umar Qasim, Awais Adil Khan

AINA-S19: Computing Wireless Mesh Networks - Room 3**Chair: Fatos Xhafa, Technical University of Catalonia, Spain**

1. System for Node Placement in WMNs: Evaluation for Different Realistic Distributions of Mesh Clients
Shinji Sakamoto, Tetsuya Oda, Albert Bravo, Leonard Barolli, Makoto Ikeda, Fatos Xhafa
2. Analysis of Mesh Router Placement in Wireless Mesh Networks Using Friedman Test
Tetsuya Oda, Leonard Barolli, Fatos Xhafa, Evjola Spaho
3. Simulation-Based Performance Evaluation of the MLSD Protocol for Infrastructure WMNs
Gledson Elias, Daniel Porto
4. On the impact of network coding delay for IEEE 802.11s infrastructure wireless mesh networks
Ernesto Carrillo, Victor Ramos

AINA-S20: Security and Privacy V - Room 4**Chair: Hiroaki Kikuchi, Meiji University, Japan**

1. Efficient and Verifiable Algorithm for Secure Outsourcing of Large-scale Linear Programming
Hairin Nie, Xiaofeng Chen, Jin Li, Joseph Liu, Wenjing Lou
2. TDFA: Traceback-based Defense against DDoS Flooding Attacks
Vahid Aghaei Foroushani, Nur Zincir-Heywood
3. Secure Routing with an Integrated Localized Key Management Protocol in MANETs
Shrikant H Talawar, Soumyadev Maity, Ramesh C. Hansdah
4. On the Use of Traffic Information to Improve the Coordinated P2P Detection of SLA Violations
Jeferson Nobre, Lisandro Z Granville, Alexander Clemm, Alberto Gonzalez Prieto

AINA-S21: Internet Computing and Web Applications I - Room 5**Chair: Muhammad Younas, Oxford Brookes University, UK**

1. DAT: Dependency analysis tool for service based business processes
Olfa Bouchaala, Mohamed Yangui, Samir Tata, Mohamed Jmaiel
2. QoE estimation for web service selection using a Fuzzy-Rough hybrid expert system
Jeevan Pokhrel, Felipe Lalanne, Ana Cavalli, Wissam Mallouli
3. Mobile application platform heterogeneity: Android vs Windows Phone vs iOS vs Firefox OS
Tor-Morten Gronli, Jarle Hansen, Gheorghita Ghinea, Muhammad Younas
4. Unbiased Estimation Based on Biased Sampled Data of Communication Networks
Shigeo Shioda

W-MAW-S1: Recommendation Systems - Room 6**Chair: Kosuke Takano, Kanagawa Institute of Technology, Japan**

1. Collaborator Recommendation for Isolated Researchers
Tin Huynh, Atsuhiko Takasu, Tomonari Masada, Kiem Hoang
2. Game Theory Based Recommendation Mechanism for Taxi-Sharing
Sheng-Tzong Cheng, Jian-Pan Li, Gwo-Jiun Horng
3. A Database Selection Method for Cherry Blossom Movies based on Changing Trend of Color Frequency
Masato Kasahara, Shu Li, Kosuke Takano

W-SMPE-S1: Security and Multimodality in Pervasive Environment I - Room 7**Chair: Jong Hyuk Park, Seoul National University of Science and Technology, Korea**

1. K-Anonymity for Privacy Preserving Crime Data Publishing in Resource Constrained Environments
Anne Kayem
2. A Secure Framework for Communications in Heterogeneous Networks
Mahdi Aiash, Glenford Mapp, Aboubaker Lasebae, Jonathan Loo
3. Intent Biometrics: An Enhanced Form of Multimodal Biometric Systems
Erez Gilady, Dale Lindskog, Shaun Aghili
4. A Steganographic Approach to Localizing Botmasters
Julian Rrushi
5. Cloud Data Integration Sharing and Service
Xin Hong, Chun-Ming Rong

W-HWISE-S1: Wireless Sensor and Body Networks - Room 8**Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan**

1. HEAT: Horizontal moveable Energy-efficient Adaptive Threshold-based Routing Protocol for Wireless Body Area Networks
Azam Afridi, Nadeem Javaid, Shawana Jamil, Mariam Akbar, Zahoor A Khan, Umar Qasim
2. Impact of Acoustic Propagation Models on Depth-based Routing Techniques in Underwater Wireless Sensor Networks
Mohsin Raza Jafri, Nadeem Javaid, Naeem Amjad, Mariam Akbar, Zahoor A Khan, Umar Qasim
3. Performance Analysis of a Non-Preemptive Hybrid WSN Protocol in Mobile Environments
Israel Leyva-Mayorga, Mario E. Rivero-Angeles, Chadwick Carreto-Arellano

W-PITSaC-S1: Invited Talk - Room 9**Chair: Antonio J. Jara, University of Applied Sciences Western Switzerland, Switzerland**

1. Everything is Digital - How the Web is Eating the World
Dr. Ian Thomas, Strategy Director, FUJITSU Enabling Software Technology GmbH, Germany

12:30-14:00 Lunch Break**14:00-15:30 Parallel Sessions****AINA-S22: Wireless Sensor Networks III - Room 1****Chair: Fumiaki Sato, Toko University, Japan**

1. Secure Data Transmission Protocol for Medical Wireless Sensor Networks
Soufiene Ben Othman, Abdullah Ali Bahattab, Abdelbasset Trad, Habib Youssef
2. HADCC: Hybrid Advanced Distributed and Centralized Clustering Path Planning Algorithm for WSNs
Muhammad Asam, Muhammad Bilal, Muhammad Asad, Asad Ali, Ehsan Ullah Munir, Tauseef Shah, Syed Bilal
3. A Synchronization and Routing Protocol for Rechargeable Sensor Networks
Fumiaki Sato
4. Mobile Sensor Networks for Leak and Backflow Detection in Water Distribution Systems
M. Agumbe Suresh, L. Smith, A. Rasekh, R. Stoleru, M.K. Banks, B. Shihada

AINA-S23: Vehicular and Cognitive Radio Networks - Room 2**Chair: Hiroshi Shigeno, Keio University, Japan**

1. Improving information dissemination in vehicular networks by selecting appropriate disseminators
Fabracio Aguiar Silva, Thais R. M. Braga Silva, Fabricio Benevenuto, Linnyer Beatrys Ruiz, Antonio A.F. Loureiro
2. Joint MAC and Network Layer Control for VANET Broadcast Communications Considering End-to-end Latency
Celimuge Wu, Satoshi Ohzahata, Yusheng Ji, Toshihiko Kato
3. A Sensitive Metric for the Assessment of Vehicular Communication Applications
Robert Protzmann, Bjorn Schunemann, Ilja Radusch
4. Mitigating Constant Jamming in Cognitive Radio Networks using Hybrid FEC Code
Victor Balogun, Axel Krings

AINA-S24: Cloud and Services Computing I - Room 3**Chair: Fatos Xhafa, Technical University of Catalonia, Spain**

1. Impact of MapReduce Task Re-execution Policy on Job Completion Reliability and Job Completion Time
Jia-Chun Lin, Fang-Yie Leu, Ying-ping Chen, Waqaas Munawar
2. Prototyping Incentive-based Resource Assignment for Clouds in Community Networks
Amin M. Khan, Umit Buyuksahin, Felix Freitag
3. Architecture of Distributed Data Aggregation Service
Vlad Serbanescu, Florin Pop, Valentin Cristea, Gabriel Antoniu
4. Reputation-based Composition of Social Web Services
Alessandro Celestini, Gianpiero Costantino, Rocco De Nicola, Zakaria Maamar, Fabio Martinelli, Marinella Petrocchi, Francesco Tiezzi

AINA-S25: Internet Computing and Web Applications II - Room 4**Chair: Fang-Yie Leu, Tunghai University, Taiwan**

1. Cache Replacement Algorithms for YouTube
Ming-Chang Lee, Fang-Yie Leu, Ying-ping Chen
2. CODE (Common Ontology DEvelopment): A Knowledge Integration Approach from Multiple Ontologies
Dhomas Hatta Fudholi, Wenny Rahayu, Eric Pardede
3. Empowering the Healthcare Worker using the Portable Health Clinic
Eiko Kai, Andrew Rebeiro-Hargrave, Sozo Inoue, Yasunobu Nohara, Rafiqul Islam Maruf, Naoki Nakashima, Ashir Ahmed
4. Semantics-enhanced Recommendation System for Social Healthcare
Nazia Zaman, Juan Li
5. Restrictions Affecting New Zealanders' Access to the Internet: A Local Study
Shadi Esnaashari, Ian Welch, Brenda Chawner

AINA-S26: Wireless Sensor Networks IV - Room 5**Chair: Umar Qasim, University of Alberta, Canada**

1. Evaluation of a Genetic Programming Approach to Generate Wireless Sensor Network Applications
Tales Heimfarth, Joao Paulo de Araujo, Renato Resende Ribeiro de Oliveira, Raphael Winckler de Bettio

2. FEEL: Forwarding Data Energy Efficiently with Load Balancing in Wireless Body Area Networks
M.M. Sandhu, N. Javaid, M. Akbar, F. Najeeb, U. Qasim, Z.A. Khan
3. OTICOR: Opportunistic Time Slot Assignment in Cognitive Radio Sensor Networks
Ons Mabrouk, Hanen Idoudi, Ichrak Amdouni, Ridha Soua, Pascale Minet, Leila Azouz Saidane
4. A TDMA-based Energy Aware MAC (TEA-MAC) Protocol for Reliable Multicast in WSNs
Ashutosh Bhatia, Ramesh C. Hansdah

W-MAW-S2: Social Networks - Room 6

Chair: Kin Fun Li, University of Victoria, Canada

1. Semantic Properties of Customer Sentiment in Tweets
Eun Hee Ko, Diego Klabjan
2. Comparative Topic Analysis of Japanese and Chinese Bloggers
Liyi Zheng, Tian Nie, Ichiro Moriya, Yusuke Inoue, Takakazu Imada, Takehito Utsuro, Yasuhide Kawada, Noriko Kando
3. Reputation on Stack Exchange: Tag, You're It!
Laura MacLeod

W-SMPE-S2: Security and Multimodality in Pervasive Environment II - Room 7

Chair: Hwa-Young Jeong, Kyung Hee University, Korea

1. Targeted Attack Prevention at Early Stage
Chia-Mei Chen, Han-Wei Hsiao, Peng-Yu Yang, Ya-Hui Ou
2. Enhancing the Key Distribution Model in the RFID-Enabled Supply Chains
Sarah Abughazalah, Konstantinos Markantonakis
3. A Resource Reservation Scheme in Cognitive Radio Ad Hoc Networks for C4I Systems
S. M. Kamruzzaman, Abdullah Alghamdi, S. M. Kamruzzaman, Abdullah Alghamdi
4. Performance Optimization by Simplification of Relationship in Scalable Layer Stream
Heung Ki Lee, Kyung Jin Ahn, Jaehee Jung, Gangman Yi
5. The Cloud Storage Model for Manufacturing System in Global Factory Automation
Hwa-Young Jeong, Jae Dong Lee, Jong Hyuk Park

W-HWISE-S2: Wireless Communication Systems - Room 8

Chair: Leandro Buss Becker, Federal University of Santa Catarina, Brazil

1. Wireless Communication Infrastructure for a Short-Range Unmanned Aerial
Joao Paulo Bodanese, Gustavo Medeiros de Arajo, Cristoph Steup, Guilherme Raffo, Leandro Buss Becker
2. A Beaconing-based Opportunistic Service Discovery Protocol for Vehicular Networks
Roberto S. Yokoyama, Bruno Yuji Lino Kimura, Luz Jaimes, Edson D. S. Moreira
3. Impacts of Periodical Burst Packet Loss on Streaming Applications - Focusing on a Mobile Network in a High-Speed Train
Masanori Terada, Kunitake Kaneko, Fumio Teraoka

W-PITSaC-S2: Big Data - Understanding the City - Room 9

Chair: Antonio J. Jara, University of Applied Sciences Western Switzerland, Switzerland

1. The Need of a Hybrid Storage Approach for IoT in PaaS Cloud Federation
Maria Fazio, Antonio Celesti, Massimo Villari and Antonio Puliafito

2. Big Data in Smart Cities: From Poisson to Human Dynamics
Antonio J. Jara, Dominique Genoud, Yann Bocchi
3. A Distributed Location-Aware Access Control for Smart Buildings
Victoria Moreno Cano, JosELuis Hernandez and Antonio F. Skarmeta
4. IPv6 as a global addressing scheme and integrator for the Internet of Things and the Cloud
Sbastien Ziegler, Cedric Crettaz and Ian Thomas

15:30-16:00 Coffee Break

16:00-17:30 Parallel Sessions

AINA-S27: Grid, P2P and Scalable Computing - Room 1

Chair: Stephen W Neville, University of Victoria, Canada

1. Performance Analysis of BitTorrent-like P2P Networks for Video Streaming Services at the Chunk Level
Edgar Eduardo Baez Esquivel, Mario E. Rivero-Angeles, Izlian Orea
2. Formal Verification of Fault-Tolerant and Recovery Mechanisms for Safe Node Sequence Protocol
Rui Zhou, Rong Min, Qi Yu, Chanjuan Li, Yong Sheng, Qingguo Zhou, Xuan Wang, Kuan-Ching Li
3. Statistical Assessment of Sybil-placement Strategies within DHT-structured Peer-to-Peer Botnets
Deepali Arora, Adam Verigin, Teghan Godkin, Stephen W Neville
4. Trust Aware System for P2P Routing Protocols
Haidar Safa, Wassim El-Hajj, Marwa Moutaweh

AINA-S28: Cloud and Services Computing II - Room 2

Chair: Fatos Xhafa, Technical University of Catalonia, Spain

1. Towards a Community Cloud Storage
Ying Liu, Vladimir Vlassov, Leandro Navarro
2. Supersaturated Cloud for Multicore Systems
Minoru Uehara
3. A Cloud Trust Evaluation System using Hierarchical Fuzzy Inference System for Service Selection
Chenhao Qu, Rajkumar Buyya
4. Robust Scheduling of Scientific Workflows with Deadline and Budget Constraints in Cloud
Deepak Poola, Saurabh Kumar Garg, Rajkumar Buyya, Yun Yang, Ramamohanarao Kotagiri

AINA-S29: Network Traffic Control and Management - Room 3

Chair: Fumiaki Sato, Toko University, Japan

1. Header Field Based Partitioning of Network Traffic for Distributed Packet Capturing and Processing
Ruediger Gad, Martin Kappes, Robin Mueller-Bady, Inmaculada Medina-Bulo
2. An approach to Overcome the Complexity of Network Management Situations by Mashments
Oscar Mauricio Caicedo Rendon, Felipe Estrada Solano, Lisandro Zambenedetti Granville
3. Design and Analysis of Symbol Detection Schemes with Imperfect CSI for SDF-Relay Networks
Ali Zarei Ghanavati, Daniel Lee
4. Determination of delay bound over multi-hop real-time switches with virtual output queuing
Sanghwa Han, Kyungtae Kang, Junhee Ryu

AINA-S30: Wireless Sensor Networks V - Room 4**Chair: Umar Qasim, University of Alberta, Canada**

1. Greedy Flooding in Redoubtable Sensor Networks
Nesrine Ouled Abdallah, Mohamed Jmaiel, Mohamed Mosbah, Akka Zemmari
2. Using Unmanned Aerial Vehicle to Connect Disjoint Segments of Wireless Sensor Network
Tales Heimfarth, Joao Paulo de Araujo
3. CEMob: Critical Data Transmission in Emergency with Mobility Support in WBANs
S. Yousaf, M. Akbar, N. Javaid, A. Iqba, Z.A. Khan, U. Qasim
4. Energy Hole Analysis for Energy Efficient Routing in BANs
K. Latif, N. Javaid, A. Iqbal, Z.A. Khan, U. Qasim, T.A. Alghamdi

AINA-S31: Network Algorithms and Systems - Room 5**Chair: Tomoya Enokido, Rissho University, Japan**

1. Stabilizing Agent's Interactions in Dynamic Contexts
Pascal Francois Faye, Mbaye Sene, Samir Aknine, Onn Sheory
2. A Simple Broadcast Algorithm for Recurrent Dynamic Systems
Michel Raynal, Jiannong Cao, Weigang Wu, Julien Stainer
3. Evaluation of the Extended Improved Redundant Power Consumption Laxity-Based (EIRPCLB) Algorithm
Tomoya Enokido, Ailixier Aikebaier, Makoto Takizawa
4. Reducing the Amount of Small Data Communication for Telematics Services
Hirohito Kakizawa, Ryoza Kiyohara

W-MAW-S3: Pattern Mining and Classification - Room 6**Chair: Kin Fun Li, University of Victoria, Canada**

1. Mining Hidden Concepts: Using Short Text Clustering and Wikipedia Knowledge
Cheng-Lin Yang, Nuttakorn Benjamasutin, Yun-Heh Chen-Burger
2. Location-Based Analysis of Developers and Technologies on GitHub
David Rusk
3. Consumer Transactions on the Web
Aili Gulinaer, Kin Fun Li

W-ITIS-S1: Innovative Services and Systems - Room 7**Chair: Akio Koyama, Yamagata University, Japan**

1. Context-Aware User Profiling and Multimedia Content Classification for Smart Devices
Abayomi M. Otebolaku and Maria T. Andrade
2. Towards Understanding the Use of Wiki in Agile Software Development
Pankaj Kamthan
3. A Proposal and Evaluation of Electricity Reduction Method in Home
Takaya Okamoto and Akio Koyama
4. SmartLocService: Place Identification Method Using Space Dependent Information for Indoor Location-Based Services
Tatsuro Hachiya and Masaki Bandai
5. Analysis of the film selection process for a film festival
Masashi Inoue and Sakie Sakuma

W-HWISE-S3: Security and Privacy - Room 8**Chair: Isaac Woungang, Ryerson University, Canada**

1. Design of a Mix Network using Connectivity Index - a Novel Privacy Enhancement Approach
Rajan Ma, Hemant Kumar Rath, P. Balamuralidhar
2. Proposal of a method detecting malicious processes
Takumi Yamamoto, Kiyoto Kawauchi, Shoji Sakurai
3. Effectiveness of DNS-based security approaches in large-scale networks
Maziar Janbeglou, Habib Naderi, Nevil Brownlee
4. C-SCAN: An Energy-Efficient Network Layer Security Protocol for Mobile Ad Hoc Networks
Sanjay Kumar Dhurandher, Isaac Woungang, Issa Traore

W-PITSaC-S3: Smart Cities - Real Deployments and Augmented Reality - Room 9**Chair: Antonio J. Jara, University of Applied Sciences Western Switzerland, Switzerland**

1. Augmented Reality based Smart City Services using Secure IoT Infrastructure
Boris Pokric, Srdjan Krco and Maja Pokric
2. Domotic evolution towards the IoT
Vittorio Miori and Dario Russo
3. A Framework for Citizen Participation in the Internet of Things
Victoria Moreno Cano, JosELuis Hernandez, Antonio F. Skarmeta, Michele Nati, Nick Palaghias, Alexander Gluhak and Rob van Kranenburg
4. MEGA: An Internet of Things-based model for smart water management
Toms Robles, Diego Mart de Andrs, Ramon Alcarria and Augusto Morales
5. Dynamic Bandwidth Distribution for Entertainment Vehicular Networks Applications
Thais Silva, Ronan Mendona, Fabricio Silva, Linnyer Beatryz Ruiz and Antonio Loureiro

20:00-22:00 Banquet Party

Friday, May 16, 2014

08:00 Registration

09:00-10:30 Parallel Sessions

AINA-S32: Cloud and Services Computing III - Room 1

Chair: Fatos Xhafa, Technical University of Catalonia, Spain

1. Open Government Data Visualization System to Facilitate Evidence-based Debate Using a Large-scale Interactive Display
Nobuyuki Kukimoto
2. Automated Dynamic Resource Provisioning and Monitoring in Virtualized Large-scale Datacenter
Sameera Abar, Pierre Lemarinier, Georgios Theodoropoulos, Gregory O'Hare
3. Secure Deduplication System with Keyword Search
Jin Li, Xiaofeng Chen, Fatos Xhafa, Leonard Barolli
4. Holistic Modeling and Performance Evaluation for Converged Network-Cloud Service Provisioning
Qiang Duan, Zhen Zheng

AINA-S33: Multimedia and Social Networking - Room 2

Chair: Pavel Kromer, VSB Technical University of Ostrava, Czech Republic

1. Capturing and Analyzing Pervasive Data for SmartHealth
Joseph Kee-Yin Ng, Jiantao Wang, Kam-Yiu Lam, Calvin Ho Chuen Ka, Song Han
2. Personalized Healthcare Recommender Based on Social Media
Juan Li, Nazia Zaman
3. Computing Sammon's Projection of Social Networks by Differential Evolution
Pavel Kromer, Milos Kudelka, Vaclav Snasel, Martin Radvansky, Zdenek Horak
4. Privacy and Node Cooperation in Mobile Social Networks
Ahmed B. Altamimi, T. Aaron Gulliver

AINA-S34: Scheduling Algorithms - Room 3

Chair: Umar Qasim, University of Alberta, Canada

1. A High-performance DAG Task Scheduling Algorithm for Heterogeneous Networked Embedded Systems
Guoqi Xie, Renfa Li, Xiongren Xiao, Yuekun Chen
2. Redundant And Relay Assistant Scheduling of Small Satellites
Lei Xia, Nenghai Yu
3. Peak Load Scheduling in Smart Grid Communication Environment
M.A. Khan, N. Javaid, M. Arif, S. Saud, U. Qasim, Z.A. Khan
4. Tabu Search Algorithm for Ground Station Scheduling
Fatos Xhafa, Xavier Herrero, Admir Barolli, Makoto Takizawa

AINA-S35: Distributed and Parallel Systems - Room 4**Chair: Kin Fun Li, University of Victoria, Canada**

1. On the Practicability to Implement Byzantine Fault Tolerant Services Based on Tuple Space
Aldelir Fernando Luiz, Lau Cheuk Lung, Luciana De Oliveira Rech
2. Combining Decomposition and Lumping to Evaluate Semi-hierarchical Systems
Nils Henning Mullner, Oliver Theel, Martin Franzle
3. Robust Parallel Redeployment Algorithm for MEMS Microrobots
Hicham Lakhlef, Julien Bourgeois, Hakim Mabad
4. Collision-fast Atomic Broadcast
Rodrigo Schmidt, Lasaro Camargos, Fernando Pedone

W-PAMS-S1: General Challenges and Mechanisms - Room 5**Chair: Thomas Dreibholz, Simula Research Laboratory, Norway**

1. Impact of Path Selection and Scheduling Policies on MPTCP Performance
Behnaz Arzani, Alexander Gurney, Shuotian Cheng, Roch Guerin and Boon Thau Loo
2. Out-of-Order Transmission for In-Order Arrival Scheduling Policy for Multipath TCP
Fan Yang, Qi Wang and Paul Amer
3. Measuring the QoS Characteristics of Operational 3G Mobile Broadband Networks
Simone Ferlin-Oliveira, Thomas Dreibholz, zg Alay and Amund Kvalbein

W-FINA-S5: Wireless Sensor and Mesh Networks - Room 6**Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan**

1. A Design for Performance Improvement of Clock Synchronization in WSNs using a TDMA-based MAC Protocol
Siddharth Watwe, Ashutosh Bhatia, Ramesh C. Hansdah
2. An Energy Consumption Analysis of Beacon Enabled Slotted CSMA/CA IEEE 802.15.4
Muhammad Babar Rasheed, Nadeem Javaid, Arsalan Haider, Umar Qasim, Zahoor A Khan, Turki Ali Alghamdi
3. RD-TDMA: A Randomized Distributed TDMA Scheduling for Correlated Contention in WSNs
Ashutosh Bhatia, Ramesh C. Hansdah
4. Utilization-Aware Channel Allocation and Routing for Mesh Networks for Battery-Powered Surveillance Cameras
HyungWon Kim

W-FINA-S6: Virtualization and Cloud Computing - Room 7**Chair: Tomoya Enokido, Risho University, Japan**

1. Migration-Less Energy-Aware Task Scheduling Policies in Cloud Environments
Syedmeahdi Hosseinimotlagh, Syedmahyar Hosseinimotlagh, Farshad Khunjush
2. Power-Latency Trade-offs in Virtualized Environments
Waltenegus Dargie, Jianjun Wen
3. Towards a Multi-tenancy aware Cloud Service Composition
Wael Sellami, Hatem Hadj kacem, Ahmed Hadj kacem
4. Cloud Services Orchestration: A comparative study of existing approaches
Khadija Bousselmi, Zaki Brahmi, Med Gammoudi

W-NetMM-S1: Network Management and Monitoring - Room 8**Chair: Stephane Maag, Télécom SudParis, France**

1. Controlling Network Processors By Using Packet Processing Cores
Yasusi Kanada
2. Role-Based Self-Appointment for Autonomic Management of Resources
Patricia Endo, Andre Palhares, Marcelo Santos, Glaucio Goncalves, Djamel F H Sadok, Judith Kellner, Azimeh Sefidcon and Fetahi Wuhib
3. A Trust Monitoring approach based on Formal Testing
Jorge Lopez, Xiaoping Che, Stephane Maag and Gerardo Morales
4. Automatic Code Instrumentation for Converged Service Monitoring and Fault Detection
Diego Adrada, Esteban Salazar, Julian Rojas and Juan Carlos Corrales

W-TeNAS-S1: Network Technologies and Big Data - Room 9**Chair: Rubem Pereira, Liverpool John Moores University, UK**

1. Downlink Femto-Macro ICI Cancellation by On Request Channel Allocation in LTE Network
Shahadate Rezvy
2. Dynamic Adaptive Streaming over HTTP and Progressive Download: Comparative Considerations
R. Pereira, E. G. Pereira
3. Automatical End to End Topology Discovery and Flow Viewer on SDN
Wun-Yuan Huang, Ta-Yuan Chou, Jen-Wei Hu, Te-Lung Liu
4. Big Data Analysis Techniques for Cyber-Threat Detection in Critical Infrastructures
William Hurst, Madjid Merabti, Paul Fergus
5. The Big Data Obstacle of Lifelogging
Chelsea Dobbins, Madjid Merabti, Paul Fergus, David Llewellyn-Jones

10:30-11:00 Coffee Break**11:00-12:30 Parallel Sessions****AINA-S36: Database and Data Mining - Room 1****Chair: Alex Thomo, University of Victoria, Canada**

1. Minimizing Cost of K-Replica in Hierarchical Data Grid Environment
Yaser Mansouri, Saeed Talatian Azad, Alireza Chamkori
2. XSM - A Tracking System for XML Schema Versions
Abdullah Baqasah, Eric Pardede, Wenny Rahayu
3. Efficient Distributed Spatial Semijoins and their Application in Multiple-Site Queries
Nawshad Farruque, Wendy K Osborn
4. Semantic Graph Compression with Hypergraphs
Arber Borici, Alex Thomo

AINA-S37: Intelligent Methods and Systems - Room 2**Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan**

1. Intelligent Electrocardiogram Monitoring System for Early Arrhythmia Detection
Juyoung Park; Kuyeon Lee; Kyungtae Kang
2. Graph Anonymization using Machine Learning
Maria Laura Maag, Ludovic Denoyer, Patrick Gallinari
3. A Semantic Approach for Learning Situation Detection
Ana Marilza Pernas, Joao Ladislau Lopes, Adenauer Yamim, Jose Palazzo
4. Prediction of Sensor Lifetime by Simulations in Wireless Sensor Networks using Fuzzy Logic
Wang Qi, Elis Kulla, Gjergji Mino, Leonard Barolli

AINA-S38: Network Modeling and Methods - Room 3**Chair: Fatos Xhafa, Technical University of Catalonia, Spain**

1. Energy-aware Replication Models of Mobile Agents
Dilawaer Duolikun, Ailixier Aikebaier, Tomoya Enokido, Makoto Takizawa
2. Role-based Information Flow Control Models
Shigenari Nakamura, Dilawaer Duolikun, Ailixier Aikebaier, Tomoya Enokido, Makoto Takizawa
3. Node Placement in WMNs Using WMN-HC System and Different Movement Methods
Xinyue Chang, Evjola Spaho, Tetsuya Oda, Leonard Barolli, Fatos Xhafa
4. A Novel Method for the Interpretation of Spectrometer Signals Based on Delta-Modulation and Similarity Determination
Petra Pernier

W-PAMS-S2: Use-Case-Specific Mechanisms - Room 5**Chair: Thomas Dreibholz, Simula Research Laboratory, Norway**

1. Retransmission Timeout Estimation for Low-Delay Applications using Multipath RTP
Ralf Globisch, Yago Sanchez, Thomas Schierl, Keith Ferguson and Thomas Wiegand
2. LEDBAT-MP - On the Application of "Lower-than-Best-Effort" for Concurrent Multipath Transfer
Hakim Adhari, Sebastian Werner, Thomas Dreibholz and Erwin Rathgeb
3. Using Concurrent Multipath Transfer to Improve the SCTP Startup Behavior for PSTN Signaling Traffic
Karl-Johan Grinnemo, Anna Brunström and Jun Cheng

W-FINA-S7: Vehicular Networks and IoT - Room 6**Chair: Nik Bessis, University of Derby, UK**

1. The Impact of Dissimilarity and Redundancy on the Reliability of DSRC Safety Applications
Ahmed Serageldin, Axel Krings
2. A Novel Long Term Traffic Forecast Algorithm and Case Study for China
Shoufeng Wang, Dongchen Zhang, Xiaoyan Xu, Tong Liang, Xingzheng Li, Wenwen Yao
3. A Study of Contact Network Generation for Cyber-bullying Detection
Mingmei Li, Atsushi Tagami
4. On the Role of Semantic Descriptions for Adaptable Protocol Stacks in the Internet of Things
Vangelis Gazis, Konstantinos Sasloglou, Andreas Merentitis, Kostas Mathioudakis
5. A review of large scale resource management simulation toolkits: Building simulations for Internet of Things
Stelios Sotiriadis, Nik Bessis, Navonil Mustafee

W-FINA-S8: Networks Protocols and Schemes - Room 7**Chair: Tomoya Enokido, Rissho University, Japan**

1. Improving and Optimizing the Operation Layer Algorithm of NETCONF Protocol
Yang-Min Lee, JaeKee Lee
2. A New Transmission Control Protocol for Active RFID Networks
Fariha Baloch, Ravi Pendse
3. Replacing Socket Communication by REST Open API for Acquisition Tax Analyzer Development
Hocheol Lim, Min Min Choi
4. Priority Scheme for Mobile Nodes in P2P Bit-Torrent Based Networks
Edgar Eduardo Bez Esquivel, Mario E. Rivero-Angeles, Alfonso Fernandez-Vazquez

W-PAEWN-S1: PAEWN - Room 8**Chair: Irfan Awan, University of Bradford, UK**

1. Optimizing Bit Transmission Power for Link Layer Energy Efficiency
Ali Zarei Ghanavati, Daniel Lee
2. On the Impact of Network Topology on Wireless Sensor Networks Performances Illustration with Geographic Routing
Tony Ducrocq, Michael Hauspie, Nathalie Mitton, Sara Pizzi
3. Theoretical Analysis and Performance Simulation of In-Band LTE Mobile Relays in Railway Environments
Jaime Calle-Snchez, David De-Antonio-Monte, Mariano Molina-Garcia, Jos I. Alonso
4. Performance Analysis of Artificial Neural Network-based Learning Schemes for Cognitive Radio Systems in LTE-UL
Ahsan Adeel, Hadi Larijani, Ali Ahmadi
5. Kernel Principal Subspace based Outlier Detection in Wireless Sensor Networks
Oussama Ghorbel