PROGRAM GUIDE

IEEE AINA 2013
The 27th IEEE International Conference on
Advanced Information Networking and Applications

March 25th - March 28th, 2013
Barcelona, SPAIN

Sponsored by:
IEEE Technical Committee on Distributed Processing (TCDP)
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**W-iCCI-S2:** Methods and Tools for Cloud Computing

**W-IWDENS-S2:** Disaster Information Systems
IEEE AINA 2013 Conference Organizing Committee

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Fatos Xhafa, Technical University of Catalonia, Spain
Kin Fun Li, University of Victoria, Canada
Minoru Uehara, Toyo University, Japan

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Beniamino Di Martino, Second University of Naples, Italy
Shengrui Wang, University of Sherbrooke, Canada

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Wenny Rahayu, La Trobe University, Australia
Markus Aleksy, ABB AG, Germany

International Special Issue Journal Co-Chairs
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Farookh Hussain, University of Technology Sydney, Australia
Jong Hyuk Park, Seoul National University of Science and Technology, Korea

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Arjan Durresi, Indiana University, Purdue University Indianapolis, USA
David Taniar, Monash University, Australia

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Akio Koyama, Yamagata University, Japan

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Treasurer / Finance Co-Chairs
Makoto Ikeda, Fukuoka Institute of Technology, Japan
Valbona Barolli, Seikei University, Japan

Web Administration Chairs
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
Makoto Takizawa, Seikei University, Japan
Leonard Barolli, Fukuoka Institute of Technology, Japan
Program Guide

IEEE AINA 2013

Program Track Co-Chairs

1. Communication Networks and Protocols
   Tsang-Ling Sheu, National Sun Yat-Sen University, Taiwan
   Alex Galis, University College London, UK

2. Ad Hoc and Mesh Networks
   Joaquin Garcia-Alfaro, TELECOM Bretagne, France
   Li Xu, Fujian Normal University, China

3. Sensor Networks
   Hanh Le, University of Cape Town, South Africa
   Akimitsu Kanzaki, Osaka University, Japan

4. Mobile Networks and Applications
   Agustinus Borgy Wahuyo, Monash University, Australia
   Michael McGuire, University of Victoria, Canada

5. Pervasive/Ubiquitous Computing
   Zhiwen Yu, Northwestern Polytechnical University, China
   Waltenegus Dargie, Tech. University of Dresden, Germany

6. Vehicular Networks and Applications
   Jinhua Guo, University of Michigan-Dearborn, USA
   Hiroshi Shigeno, Keio University, Japan

7. Distributed and Parallel Systems
   Cho-Li Wang, University of Hong Kong, Hong Kong
   Siegfried Benkner, University of Vienna, Austria

8. Distributed Database and Data Mining
   Eric Pardede, La Trobe University, Australia
   Paolo Trunfio, University of Calabria, Italy

9. Grid, P2P and Scalable Computing
   Kuan-Ching Li, Providence University, Taiwan
   Dieter Kranzlmueller, Ludwig Maximillian University Munich, Germany

10. Internet Computing and Web Applications
    Mohammad Younas, Oxford Brookes University, UK
    Qingshan Jiang, Chinese Academy of Sciences, China
11. **Multimedia and Social Networking**  
Changhoon Lee, SoulTech, Korea  
Mohamed Bouguessa, University of Quebec at Montreal, Canada

12. **Agents, Semantics and Intelligent Computing**  
Giacomo Cabri, University of Modena and Reggio Emilia, Italy  
Brahim Chaib-draa, Laval University, Canada

13. **Cloud and Services Computing**  
Kuo-Ming Chao, Coventry University, UK  
Chunming Rong, University of Stavanger, Norway

14. **Security and Privacy**  
Hiroaki Kikuchi, Tokai University, Japan  
Antonino Mazzeo, University Federico II of Naples, Italy

15. **Autonomic and Trustworthy Computing/Networking**  
Albert Zomaya, University of Sidney, Australia  
Nur Zincir-Heywood, Dalhousie University, Canada
Message from IEEE AINA 2013 General Co-Chairs

It is our great pleasure to welcome you all at the 27th IEEE International Conference on Advanced Information Networking and Applications (IEEE AINA 2013). The conference will be held in Barcelona, Spain, on March 25-28, 2013. 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 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 cover theory, design and application of computer networks, distributed computing, and information systems.

Each year AINA has received high-quality submissions 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 2013 conference, there are 23 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 2013 technical program and conference proceedings. First, we would like to thank all of the 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 organizing the conference and shaping the conference program. We would like to thank Prof. Hui-Huang Hsu, Tamkang University, Taiwan, Prof. Beniamino Di Martino, Second University of Naples, Italy, and Prof. Shengrui Wang, University of Sherbrooke, Canada, for their great work as PC Co-Chairs. We give thanks to Workshops Co-Chairs, Dr. Tomoya Enokido, Rissho University, Japan, Dr. Wenny Rahayu, La Trobe University, Australia, and Dr. Markus Aleksy, ABB AG, Germany.

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

Finally, we 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 Barcelona, Spain.

IEEE AINA 2013 General Co-Chairs

Fatos Xhafa, Technical University of Catalonia, Spain
Kin Fun Li, University of Victoria, Canada
Minoru Uehara, Toyo University, Japan
Message from IEEE AINA 2013 Program Committee Co-Chairs

Welcome to the 27th IEEE International Conference on Advanced Information Networking and Applications (IEEE AINA 2013), which will be held in Barcelona, Spain, on March 26-28, 2013.

The purpose of 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 AINA received 567 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 159 papers (about 28 presented during the conference. Unfortunately, many interesting and good papers could not be accepted in IEEE AINA 2013 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 by Dr. Wenny Rahayu, La Trobe University, Australia, and Prof. Antonio F. Skarmeta Gomez, University of Murcia, Spain, who will present their recent work and give new insights and ideas to the conference participants.

Organizing an international conference of this size is a team effort. Therefore, we gladly admit that we had the help of many very professional people. First, we would like to thank all of the authors for their interesting contributions since they shape the program and make it interesting for the audience. Moreover, we express our gratitude to all program-vice chairs for their great efforts. Additionally, we thank all of program committee members and reviewers who carried out the most important work to evaluate the submitted papers. We also thank the workshops chairs, Dr. Tomoya Enokido, Rissho University, Japan, Dr. Wenny Rahayu, La Trobe University, Australia, and Dr. Markus Aleksy, ABB AG, Germany, 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 the AINA conference, requires a lot of coordination effort as well as many other activities related to the conference organization. We thank the general co-chairs Prof. Fatos Xhafa, Technical University of Catalonia, Spain, Dr. Kin Fun Li, University of Victoria, Canada, and Prof. Minoru Uehara, Toyo University, Japan, for their great support and invaluable suggestions. We give special thanks to Dr. Makoto Ikeda for his great efforts and efficient work in dealing with many conference matters.

We hope you will enjoy the conference and readings and have a great time in Barcelona.

IEEE AINA 2013 Program Committee Co-Chairs

Hui-Huang Hsu, Tamkang University, Taiwan
Beniamino Di Martino, Second University of Naples, Italy
Shengrui Wang, University of Sherbrooke, Canada
Message from IEEE AINA 2013 Steering Committee Co-Chairs

Welcome to the 27th IEEE International Conference on Advanced Information Networking and Applications (IEEE AINA 2013). It is our great pleasure and honor to host AINA 2013 in Barcelona, Spain, on March 25-28, 2013. On behalf of the AINA Steering Committee and IEEE AINA 2013 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 27 years ago and is now an International Conference, thanks to the help and cooperation of many international volunteers. AINA is an open society and is always welcoming international volunteers from any country and any area in the world.

In 2003, AINA 2003 was held very successfully in Xian, China, with its present name. Before 2003, the conference name was ICOIN (International Conference on Information Networking). In 2003, we decided to change the name of the conference to AINA and also change the conference policy to make the conference more international. Now, AINA is an International Conference sponsored by TCDP of IEEE Computer Society. From 2003, AINA editions are held in Fukuoka, Japan, 2004; Taipei, Taiwan, 2005; Vienna, Austria, 2006; Niagara, Canada, 2007; Okinawa, Japan, 2008; Bradford, UK, 2009; Perth, Australia, 2010; Singapore, 2011; and Fukuoka, Japan, 2012.

In conjunction with the AINA main conference, we have also 23 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 with the support and voluntary efforts of many people and organizations; our main responsibility is to coordinate various tasks carried out with other willing and talented volunteers.

We would like to thank IEEE AINA 2013 General Co-Chairs Prof. Fatos Xhafa, Technical University of Catalonia, Spain, Dr. Kin Fun Li, University of Victoria, Canada, and Prof. Minoru Uehara, Toyo University, Japan, for their tremendous efforts in the very successful organization of IEEE AINA 2013.

We express our special thanks to Prof. Hui-Huang Hsu, Tamkang University, Taiwan, Prof. Beniamino Di Martino, Second University of Naples, Italy, and Prof. Shengrui Wang, University of Sherbrooke, Canada, for producing an excellent technical program as the Program Co-Chairs. We thank Prof. Hui-Huang Hsu, who worked very hard to organize IEEE AINA 2013.

We appreciate Dr. Tomoya Enokido, Rissho University, Japan, Dr. Wenny Rahayu, La Trobe University, Australia, and Dr. Markus Aleksy, ABB AG, Germany, for organizing 23 excellent workshops in conjunction with IEEE AINA 2013. We extend special thanks to Dr. Tomoya Enokido for his leading role and efforts to invite participants and create many successful workshops.

We thank all of track area chairs, program committee members, workshops organizers and workshops committee members for carefully reviewing the papers. We thank Dr. Makoto Ikeda, Mr. Elis Kulla, and Ms. Evjola Spaho, Fukuoka Institute of Technology, Japan as Web administrators.

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

We thank our IEEE Computer Society TCDP, as Sponsor of IEEE AINA 2013.

Finally, we would like to thank the Local Arrangement Team at Technical University of Catalonia, Spain, for their support and for making excellent local arrangement for the conference.
We hope that you will have a great time in Barcelona, Spain.

**IEEE AINA 2013 Steering Committee Co-Chairs**

Makoto Takizawa, Seikei University, Japan
Leonard Barolli, Fukuoka Institute of Technology, Japan
Message from IEEE AINA 2013 Workshops Co-Chairs

Welcome to the AINA 2013 workshops to be held in conjunction with the 27th IEEE International Conference on Advanced Information Networking and Applications, in Barcelona, Spain. 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 23 symposiums and workshops will be held with AINA 2013.

1. The Sixth International Workshop on Data Management for Wireless and Pervasive Communications (DMWPC 2013)
2. The Second International Workshop on Networked Virtual Enterprises (NetVE 2013)
3. The Eighth International Workshop on the Performance Analysis and Enhancement of Wireless Networks (PAEWN 2013)
5. The Sixth International Symposium on Mining and Web (MAW 2013)
6. The Fifth International Workshop on Disaster and Emergency Information Network Systems (IWDENS 2013)
7. The Sixth International Workshop on Bio and Intelligent Computing (BICom 2013)
8. The Ninth International Workshop on Heterogeneous Wireless Networks (HWISE 2013)
9. The Sixth International Workshop on Telecommunication Networking, Applications and Systems (TeNAS 2013)
11. The Seventh International Symposium on Security and Multimodality in Pervasive Environment (SMPE 2013)
12. The Second International Workshop on inter-Clouds and Collective Intelligence (iCCCI 2013)
15. The First International Workshop on Collaborative Enterprise Systems (COLLABES 2013)
17. The International Workshop on Cloud Computing: Project and Initiatives (CCPI 2013)
18. The First International Workshop on Pervasive Internet of Things and Smart Cities (PITSaC 2013)

20. The First International Workshop on Network Management and Monitoring (NetMM 2013)

21. The First International Workshop on Social Media & Mobility in Enterprises (SMME 2013)

22. The International Workshop on Bioinformatics and Life Science Modeling and Computing (BLSMC 2013)


We would like to thank the community for their great response to IEEE AINA 2013 workshops. The excellent technical program of the workshops was the result of professional collaboration 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 2013 workshops and symposiums. We would like to thank IEEE AINA 2013 General Co-Chairs, Prof. Fatos Xhafa, Dr. Kin Fun Li, and Prof. Minoru Uehara, for their advice in making possible the organization of IEEE AINA 2013 workshops and symposiums. We are thankful to IEEE AINA2013 Program Co-Chairs, Prof. Hui- Huang Hsu, Prof. Beniamino Di Martino, and Prof. Shengrui Wang for their support and help in preparing the technical program of AINA 2013 workshops and symposiums. We express special thanks to Dr. Makoto Ikeda, Mr. Elis Kulla, and Ms. Evjola Spaho for their timely unlimited support as web administrators.

We wish all of you entertaining and rewarding experiences in all workshops and the IEEE AINA 2013 International Conference.

IEEE AINA 2013 Workshops Co-Chairs

Tomoya Enokido, Rissho University, Japan
Wenny Rahayu, La Trobe University, Australia
Markus Aleksy, ABB AG, Germany
IEEE AINA 2013 Keynote I

Dr. Wenny Rahayu, Associate Professor, La Trobe University, Australia

Data Integration and Visualisation in Temporal Spatial Decision Support Systems

Abstract: With the development of global standards for data interchange in time critical domains such as air traffic control, transportation systems, and medical informatics, the general industry in these areas have started to move into a more data-centric operations and services. The main aim of the standards is to support integration and collaborative decision support systems that are operationally driven by the underlying data.

The problem that impedes rapid and correct decision-making is that information is often segregated in many different formats and domains, and integrating them has been recognised as one of the major problems. For example, in the aviation industry, weather data given to flight en-route has different formats and standards from those of the airport notification messages. The fact that messages are exchanged using different standards has been an inherent problem in data integration in many spatial temporal domains. The solution is to provide seamless data integration so that a sequence of information can be analysed on the fly.

Our aim is to develop an integration method for data that comes from different domains that operationally need to interact together. We especially focus on those domains that have temporal and spatial characteristics as their main properties. For example, in a flight plan from Melbourne to Barcelona which comprises of multiple international airspace segments, a pilot can get an integrated view of the flight route with the weather forecast and airport notifications at each segment. This is only achievable if flight route, airport notifications, and weather forecast at each segment are integrated in a spatial temporal system.

In this talk, our recent efforts in large data integration, filtering, and visualisation will be presented. These integration efforts are often required to support real-time decision making processes in emergency situations, flight delays, and severe weather conditions. In particular, our work has been targeted for situations where current and predicted spatial-temporal data (moving objects and static objects) is an essential part of the decision making.
IEEE AINA 2013 Keynote II

Prof. Antonio Skarmeta, University of Murcia, Spain

The Impact of Internet of Things in Big Data Approach and Future Internet

Abstract: The evolution of the Internet towards the Future Internet, with the Internet of Things (IoT) as one of the main drivers, is defining an extension from the initial Internet. This Intranet of Things is being extended to smart things with a higher scalability, pervasiveness, and integration into the Internet Core. The ongoing and future work aims to create an extended Internet of Things. This requires both an architecture and products that allow for the extension of the Internet technologies, in order to reach a homogeneous integration of the Future Internet, Services, People, and Things with the Future Internet of Things, Services and People.

This drives to integrate everything into the Internet Core is motivated by the market wish to have all processes remotely accessible, together with an understanding that re-engineering an infrastructure to allow this for each application would be prohibitively costly and time-consuming. Moreover, the current evolution from uniform mass markets, to personalized ones, where the customization and user-specified adaptation is a requirement, makes the sort of uniform infrastructure found in Internet, imperative. This allows many components to be re-used, and services to be shared, with correspondingly huge economies of scale and shortened completion times.

The Internet of Things (IoT) fills the gap between the needs arising from the evolution of the market, information, users, and things, by moving all of them to a common framework, the Internet, and at the same time give possibility to new challenges as the amount of additional information that can be generated and use. This Big Data challenge will have also impact on the use of IoT in new areas like Smart Cities, Transportation and several others what will affect the Future Internet ecosystem globally.

In this talk, recent efforts in the integration of IPv6 into the IoT, with emphasis on legacy system support and the coexistence strategy for the management of heterogeneous technologies and architectures. These integration efforts will be presented over some environments and instantiation that are devoted for support Smart Cities scenarios like efficient energy management, or intelligent transport systems and the use of the data gathering capabilities over new decision support system based on the IoT integration.
IEEE AINA 2013 Main Conference and Workshops Program

Monday, March 25, 2013

08:00 Registration

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

IEEE AINA 2013 Keynote Talk I (PLENARY ROOM)

Dr. Wenny Rahayu: Data Integration and Visualisation in Temporal Spatial Decision Support Systems

10:30-11:00 Coffee Break

11:00-12:30 Parallel Sessions

AINA-S1: Energy-Efficient & Energy Management Algorithms & Systems - Room 1

1. An Energy-Efficient Redundant Execution Algorithm by Terminating Meaningless Redundant Processes
   Tomoya Enokido, Ailixier Aikebaier, Makoto Takizawa

2. A Energy Efficient Data Collection Method by Two Types Routes Selection in Triage Networks
   Takuya Okamoto, Takuya Saito, Hiroshi Shigeno

3. A Dynamic Energy-aware Server Selection Algorithm
   Takuro Inoue, Ailixier Aikebaier, Tomoya Enokido, Makoto Takizawa

4. PLEMS: Plug Load Energy Management Solution for Enterprises
   Animikh Ghosh, Ketan Patil, Sunil Kumar Vuppala
AINA-S2: Clustering in Sensor Networks - Room 2

1. Overlapped Schedules with Centralized Clustering for Wireless Sensor Networks
   Ibrahim Ammar, Gazlan Miskeen, Irfan Awan

   Abobeker Sidhik Koyampamabil Mammu, Ashwani Sharma, Unai Hernandez-Jayo, Nekane Sainz

3. An Event-Driven Clustering Scheme for Data Aggregation in Real-Time Wireless Sensor Networks
   Besem Abid, Wiam Elghazel, Hamida Seba, Souleymane Mbenque

4. Distributed Spatial Correlation-based Clustering for Approximate Data Collection in WSNs
   Zhidan Liu, Wei Xing, Bo Zeng, Yongchao Wang, Dongming Lu

AINA-S3: Inter-Cloud and Data Centers - Room 3

1. The inter-cloud meta-scheduling (ICMS) framework
   Stelios Sotiriadis, Nik Bessis, Pierre Kuenen, Nick Antonopoulos

   Mark Gall, Angelika Schneider, Niels Fallenbeck

3. HCube: A Server-centric Data Center Structure for Similarity Search
   Rodolfo da Silva Villaca, Rafael Pasquini, Luciano Bernardes de Paula, Mauricio Ferreira Magalhaes

4. SimIC: Designing a new Inter-Cloud Simulation platform for integrating large-scale resource management
   Stelios Sotiriadis, Nik Bessis, Nick Antonopoulos, Ashiq Anjum

AINA-S4: Network Attack and Malware Detection - Room 4

1. A Study on Noise-Tolerant PN Code-Based Localization Attacks to Internet Threat Monitors by Exploiting Multiple Ports
   Masaki Narita, Bhed Bahadur Bista, Toyoo Takata

2. Network Attack Analysis and the Behaviour Engine
   Anthony Paul Benham, Huw Read, Iain Sutherland

3. Game-based Simulation of Distributed Denial of Service (DDoS) Attack and Defense Mechanisms of Critical Infrastructures
   Rainer Poisel, Marlies Rgbinsek, Simon Tjoa

4. A New Android Malware Detection Approach Using Bayesian Classification
   Saleiman Y. Yerima, Sakir Sezer, Gavin McWilliams, Igor Mutlik

W-FINA-S1: Mobile, Ad Hoc and Mesh Networks - Room 5

1. Impact of IEEE 802.11 PHY/MAC Strategies on Routing Performance in Wireless Mesh Networks
   Chiraz Houaiddia, Hanen Idoudi, Adrien Van Den Bossche, Thierry Val, Leila Saidane

2. Multihop Mobility Metrics based on Link Stability
   Namusale Chama, Rute C. Sofia, Susana Sargento

3. CORP: An Efficient Protocol to Prevent Data Loss in Mobile Ad-Hoc Networks
   Ganapathy Mani

4. Early Detection Method of Service Quality Reduction Based on Linguistic and Time Series Analysis of Twitter
   Kazushi Ikeda, Gen Hattori, Chihiro Ono, Hideki Asah, Teruo Higashino
W-FINA-S2: Distributed and Parallel Systems - Room 6
1. Applying Reputation to Virtual Magnetic Networks
   Henrique Galperin, Luiz Augusto de Paula Lima Jr., Alcides Calsavara
2. Performance Evaluation of Hierarchical-Torus NoC
   Samia Louicif
3. Acceleration of Communication-Aware Task Mapping Techniques through GPU Computing
   Javier Reyes, Juan Manuel Orduna, Guillermo Vigueras, Rafael Tornerro

W-HWISE-S1: Ad-Hoc Networks - Room 7
1. Extensive Simulation Performance Analysis for DSDV, DSR and AODV MANET Routing Protocols
   Qutaiba Razouqi, Ahmed Boushehri, Mohamed Gaballah, Lina Alsaleh
2. Effect Of Relay Nodes On End-to-end Delay In Multi-hop Wireless Ad-hoc Networks
   Raja Vara Prasad Yerra, Pachamuthu Rajalakshmi
3. A Novel Probabilistic Key Management Algorithm for Large-scale MANETs
   Mohammed Gharib, Ehsan Emamjomeh-Zadeh, Ashkan Norouzi-Fard, Ali Movaghar
4. GAODV: A Modified AODV against single and collaborative Black Hole attacks in MANETs
   Sanjay K. Dhurandher, Isaac Woungang, Raveena Mathur, Prashant Khurana
5. A Secure and Efficient Authentication Protocol (SEAP) for MANETs with Membership Revocation
   Soumyadev Maity, R. C. Hansdah

W-HWISE-S2: WSNs Algorithms and Systems - Room 8
1. Performance Comparison of Wireless Sensor Networks for Different Speeds of Multi Mobile Sensor Nodes
   Tao Yang, Elis Kulla, Leonard Barolli, Gjergji Mino, Makoto Takizawa
2. A distributed TDMA slot scheduling algorithm for spatially correlated contention in WSNs
   Ashutosh Bhatia, R.C. Hansdah
3. Inner-Distance Measurement and Shape Recognition of Target Object Using Networked Binary Sensors
   Shigeo Shiada
   Tatsuhiko Nakano, Yutaka Arakawa, Shigeaki Tagashira, Akira Fukuda, Riadh Dhaou

W-PAEWN-S1: WSNs, VANETS, and Mesh Networks - Room 9
1. Simulating Wireless Nano Sensor Networks in the NS-3 platform
   G. Piro, L.A. Grieco, G. Boggia, P. Camarda
2. An Admission Control Scheme Based on Transmission Scheduling for Wireless Mesh Networks
   Dromard Juliette, Khoski Lyes, Khatoun Rida
3. An LSPI based reinforcement learning approach to enable network cooperation in cognitive wireless sensor network
   Milos Rovcanin, Eli De Poorter, Ingrid Moerman, Piet Demeester
4. A Performance evaluation of load balancing and QoS-aware gateway discovery protocol for VANETs
   Noura Aljeri, K. Abrougui, M. Almulla, A. Boukerche

PITSAC: Tutorial - Plenary Room
12:30-14:00 Lunch Break

14:00-15:30 Parallel Sessions

AINA-S5: Distributed and Parallel Systems - Room 1
1. Coordination and Computation in distributed intelligent MEMS
   Julien Bourgeois, Jiannong Cao, Michel Raynal, Dominique Dhoutaut, Benoît Piranda, Eugen Dedu, Ahmed Mostefaoui, Hakim Mabed
2. ShmStreaming: A Shared Memory Approach for Improving Hadoop Streaming Performance
   Longbin Lai, Jingyu Zhou, Long Zheng, Huakang Li, Yanchao Lu, Feilong Tang, Minyi Guo
3. Low Complexity Routing Algorithm for Rearrangeable Switching Networks
   Amitabh Chakrabarty, Martin Collier
4. Steady State Genetic Algorithm for Ground Station Scheduling Problem
   Fatos Xhafa, Admir Barolli, Makoto Takizawa

AINA-S6: Multimedia and Social Networking - Room 2
1. Design and Simulation of a Distributed Control Scheme for Inter-Destination Media Synchronization
   Mario Montagud, Fernando Boronat, Hans Stokking
2. Local Search Heuristics for Media Streams Planning Problem
   Jiri Marek, Petr Holub, Hana Rudova
3. QoS for JPEG2000 Storage System. Based on Data Structure
   Jesus M. Barbero, Carolina Gallardo
4. A Comparative Study of Expert Search Strategies in Online Social Networks
   Yuh-Jzer Joung, Shy-Min Chen, Chih-Chang Wu, Terry Hui-Ye Chiu

AINA-S7: Security and Reliability in Wireless Sensor Networks - Room 3
1. Energy-efficient Data Gathering for Road-side Sensor Networks ensuring Reliability and Fault-tolerance
   Suchetana Chakraborty, Sandip Chakraborty, Sukumar Nandi, Sushanta Karmakar
   Bafrin Zarei, Vallipuram Muthukumarasay, Xin-Wen Wu
3. How to Build Random Key Pre-distribution Schemes with Self-healing for Multiphase WSNs
   Atsuko Miyaji, Kazumasa Omote

AINA-S8: Services Computing - Room 4
1. Grid on Cloud
   Shinichiro Kibe, Motoi Yamagawa, Minoru Uehara
2. ETIS Efficient Trust and Identity Management System for Federated Service Providers
   Makarand V. Bhonsle, Nayot Poolsappasit, Sanjay K. Madria
3. A New Concurrency Control Language for Transactional Process in Service-Oriented Architecture
   Gwan-Hwan Hwang, Chi Wu-Lee, Han-Meng Chiang
4. AAGA: Affinity-Aware Grouping for Allocation of Virtual Machines
   Jianhai Chen, Kevin Chiew, Deshi Ye, Liangwei Zhu, Wenzhi Chen
W-FINA-S3: Communication Technologies - Room 5
1. A New Active Path Identification and Filtering Method
   Lin Chen, Guilin Cai, Ming He, Zhihong Liu
2. The Throughput Benefits of Network Coding for SW-ARQ Communication
   Alaa Alsebae, Mark Leeson, Roger Green
3. On the Gaussian Characteristics of Aggregated Short-lived Flows on High-Bandwidth Links
   Ghasem Kahe, Amir Hossein Jahangir

W-FINA-S4: Modeling and Multimedia Systems - Room 6
1. Modeling Controls for Compliance & An Analysis of Business Process Modeling Languages
   Hans Betke, Kai Kittel, Stefan Sackmann
2. Image Objects Phase/Intensity Measurements with Conjugated Liquid Crystal Modulators over Mach-Zehnder Interferometry
   Jen-Fa Huang, Tu-Chen Nieh, Yu-Chang He
3. Experiment of Geometrically Invariant and Unneeded Synchronism Watermarking Using Winding Number
   Hiroki Nishikawa, Yoshio Kakizaki, Keiichi Iwamura, Isao Echizen

W-HWISE-S3: Network Applications - Room 7
1. Access Control with RFID in the Internet of Things
   Steffen Elmstrom Holst Jensen, Rune Hylsberg Jacobsen
2. Scheduling Workflows in Multi-Cluster Environments
   Silvio Luiz Stanzani, Liria Matsumoto Sato, Marco A. S. Netto
3. Empirical Evaluation of Superposition Coded Multicasting for Scalable Video
   Chun Pong Lau, Basem Shihada, Pin-Han Ho
4. Improving Secure Routing Protocols Using Additional Features
   Jose Luis Tornos, Jose Luis Salazar

W-HWISE-S4: WSNs Performance Analysis - Room 8
1. On Determining Bandwidth Usage Threshold to Support Real-Time Multimedia Applications in Wireless Multimedia Sensor Networks
   Muhammad Omer Farooq, Thomas Kunz
2. Single-Sink Mobility Performance Analysis on a Wireless Sensor Networks
   Majid Bayani, Luis Lopez
3. Wireless Networks Sensors and Social Streams
   Dmitry Namiot, Manfred Spens-Sneppe

W-PAEWN-S2: Communication Systems - Room 9
1. A Modular Architecture for QoS Provisioning over Wireless Links
   Maurizio Casoni, Alessandro Paganelli, Paolo Valente
2. Multi-threaded Simulation of 4G Cellular Systems within the LTE-Sim Framework
   Alessandro Pellegrini, Giuseppe Piro
3. Effect of radio interference models on the performance of time slot assignment algorithms in IEEE 802.16j relay networks
   Ryosuke Mine, Go Hasegawa, Yoshiaki Taniguchi, Hirotaka Nakano
4. Joint Random Linear Network Coding and Convolutional Code with Interleaving for Multihop Wireless Network
   Misfa Susanto, Yim Fan Hu, Prashant Pillai
PITSAC: Tutorial - Plenary Room

15:30-16:00 Coffee Break

16:00-17:30 Parallel Sessions

AINA-S9: Security Analysis - Room 1
1. Passive OS Fingerprinting by DNS Traffic Analysis
   Takashi Matsunaka, Akira Yamada, Ayumu Kubota
2. Learning Anomalies in IDSs by means of Multivariate Finite Mixture Models
   Nicola Greggio
3. A Generic Construction of Proxy Signatures from Certificateless Signatures
   Lei Zhang, Qianhong Wu, Bo Qin, Josep Domingo-Ferrer, Peng Zeng, Jianwei Liu, Ruiging Du
4. A Network Modeling and Analysis Tool for Perfectly Secure Communication
   Stefan Rass, Benjamin Rainer, Matthias Vavti, Stefan Schauer

AINA-S10: Network Applications - Room 2
1. Directional Pulse/Tone Based Channel Reservation
   Lucas de Melo Guimaraes, Jacir Luiz Bordim
2. A Risk Taking Routing Algorithm for Delay Tolerant Networks
   Maziar Mirzazad Barjough, Nasser Yazdani, Djanshid Tavanvarian, Robil Daher
3. LABERIO: Dynamic load-balanced routing in OpenFlow-enabled networks
   Hui Long, Yao Shen, Minyi Guo, Feilong Tang
4. A failure recovery method based on cycle structure and its verification by OpenFlow
   Junichi Nagano, Norishiko Shinomiya

AINA-S11: Wireless Mesh Networks - Room 3
1. Node Placement in WMNs: Performance Evaluation of WMN-GA System for Weibull and Exponential Distribution of Mesh Clients
   Tetsuya Oda, Evjola Spaho, Admir Barolli, Fatos Xhafa, Leonard Barolli, Makoto Takizawa
2. An Energy Efficient Distributed Scheduling Scheme for Wireless Mesh Networks
   Kanthaiah Sivapragasam Vijayalayan, Aaron Harwood, Shanksa Karunasekera
3. Analysis of WMN-GA Simulation Results: WMN Performance Considering Hot-spot Scenario
   Makoto Ikeda, Tetsuya Oda, Elis Kulla, Taiki Honda, Leonard Barolli, Fatos Xhafa
4. Design of Optimized AODV Routing Protocol for Multi-Interface Multi-Channel Wireless Mesh Networks
   Won-Suk Kim, Sang-Hwa Chung

AINA-S12: Wireless Sensor Networks Protocols - Room 4
   Hyungseop Hong, Seungmin Oh, Jeongcheol Lee, Sang-Ha Kim
2. ABRM: In-Network Aggregation Based Routing Protocol for Mobile Sensor Networks with Multiple Mobile Sinks
   Maged S. Soliman, Hosam M. A. Fahmy, Ashraf E. Salem
3. The problem of joint scheduling and power assignment in wireless sensor networks
   Ada Gogu, Supriyo Chatterjea, Dritan Nace, Arta Dilo
4. Dynamic Aggregation Protocol for Wireless Sensor Networks
   Adel Mounir Sareh Said, Ashraf William Ibrahim, Ahmed Soua, Hossam Afifi

W-FINA-S5: Authentication and Secure Systems - Room 5

1. An ECC-Time Stamp based Mutual Authentication and Key Management Scheme for WSNs
   Gaurav Indra, Renu Taneja
2. An add-on for Security on Concurrent Multipath Communication SCTP
   Hamideh Jabalameli, Abbas Malekpour, Rasheed Hassani, Peter Luksch
3. DNS Update Extension to IPv6 Secure Addressing
   Hosnieh Rafiee, Martin von Lwis, Christoph Meinel

W-FINA-S6: Wireless and Sensor Networks - Room 6

1. Data Collection From Isolated Clusters in Wireless Sensor Networks Using Mobile Ferries
   Konstantin Mikhailov, Jouni Tervonen
   Geon Yong Park, Heesung Kim, Hui Woon Jeong, Hee Yong Youn
3. Performance Analysis of Medium Access Control Protocol for Wireless Body Area Networks
   Nourchene Bradai, Lamia Chaari Fourati, Lotfi Kamoun

W-HWISE-S5: Vehicular Networks Applications - Room 7

1. Vehicle Path Verification using Wireless Sensor Networks
   Gerry Howser, Sriam Chellappan, Vamsi Paruchuri
2. WiFi for Vehicular Communication Systems
   Janis Jansons, Ernests Petersons, Nikolajs Bogdanovs
3. WiMAX-WLAN Vehicle-to-Infrastructure Network Architecture During Fast Handover Process
   Michael Charitos, Grigorios Kalivas

W-HWISE-S6: Models and Methods for WSNs - Room 8

1. Stabilization and Lifetime Optimization in Distributed Sensor Networks
   Jacques Bahi, Mohammed Haddad, Mourad Hakem, Hamamache Kheddouci
   Ravindara Bhatt, Raja Datta
3. ANCH: A New Clustering Algorithm for Wireless Sensor Networks
   Morteza M. Zanjireh, Ali Shahrai, Hadi Larjani
   Alaa Atassi, Naoum Sayegh, Imad Elbajj, Ali Chehab, Ayman Kayssi

W-PAEWN-S3: Performance Evaluation of Wireless and Mobile Networks - Room 9

   Suraj Verma, Prashant Pillai, Yim-Fun Hu
2. The Price of Secure Mobile Video Streaming
   Gabor Feher
   Daeha Jin, Junhee Ryu, Juyoung Park, Jaemyoun Lee, Heonshik Shin, Kyungtak Kang
W-CCSI-S1: Algorithms and Modeling for Cloud Computing - Plenary Room

1. Performance Analysis and Optimization of Map Only Left Outer Join
   Ming Hao, Tomasz Wiktor Wlodarczyk, Chunming Rong

2. Efficient Service Management for Multimedia Sessions in Hybrid Clouds
   Cristina Dutu, Elena Simona Apostol, Catalin Leordeanu, Valentin Cristea

3. Static testing as a service on Cloud
   Siqin Chen, Junfei Huang, Yunzhan Gong

4. Structured and unstructured data in the Cloud: A Swiss perspective on readiness and internal controls
   David Simms, Solange Ghernaouti

   He-Sheng Wu, Chong-Jun Wang, Jun-Yuan Xie

17:30-17:45 Coffee Break

17:45-19:15 Parallel Sessions

AINA-S13: Cloud Platforms and Infrastructures - Room 1

1. PaaS on IaaS
   Shinichiro Kibe, Syota Watanabe, Kohta Kunishima, Ryo Adachi, Motoi Yamagiwa, Minoru Uehara

2. Service Component Architecture for Geographic Information System in Cloud Computing Infrastructure
   Feng-Cheng Lin, Lan-Kun Chung, Wen-Yuan Ku, Lin-Ru Chu, Tien-Yin Chou

3. Dynamic Voltage and Frequency Scaling in Multimedia servers
   Alaa Brihi, Wallenegus Dargie

4. Boosting Metrics for Cloud Services Evaluation - The Last Mile of Using Benchmark Suites
   Zheng Li, Liam O’Brien, He Zhang, Rainbow Cai

AINA-S14: Authentication Schemes and Protocols - Room 2

1. Design and Implementation of a Functional Extension Framework for Authn & Authz Federation Infrastructure using Web Browser Add-on
   Toyokazu Akiyama, Takeshi Nishimura, Kazutsuna Yamaji, Motonori Nakamura, Yasuo Okabe

2. Deterministic and Authenticated Flow Marking for IP Traceback
   Vahid Aghaei Foroushani, A. Nar Zincir-Heywood

3. Forensically-Sound Methods to Collect Live Network Evidence
   Aniello Castiglione, Giuseppe Cattaneo, Giancarlo De Maio, Alfredo De Santis

AINA-S15: Agents and Intelligent Computing - Room 3

   Babak Khosravifar, Francois Bouchet, Reza Feyzi-Behnagh, Roger Azevedo, Jason M. Harley

2. Investigating a Socially Inspired Heterogeneous System of Problem Solving Agents
   Diego Vrague Noble, Ricardo Matsumura Araujo, Luis da Cunha Lamb

3. A Highly Integrable FPGA-Based Runtime-Configurable Multilayer Perceptron
   Jan Skodzik, Vlado Altmann, Benjamin Wagner, Peter Daniels, Dirk Timmermann

4. FuzzyCDN: Fuzzy Redirection Algorithm
   Thiago Queiroz de Oliveira, Marcial P. Fernandez
AINA-S16: Schemes and Algorithms for Mobile Networks - Room 4

1. Exploring Service and Buffer Management Issues to Provide Integrated Voice and Data Services in Single and Multi-Channel Wireless Networks
   Eser Gemikonakli, Glenford Mapp, Orhan Gemikonakli, Eweer Ever

2. Just-In-Time Push Prefetching: Accelerating the Mobile Web
   Nicholas D.R. Armstrong, Paul A.S. Ward

3. An Approach to Rapid Prototyping of Mobile Applications
   Markus Aleksy

4. Interference Cancellation Schemes for Spread Spectrum Systems with Blind Principles
   Mattaka Gamage Samantha Sriyananda, Jyrki Joutsensalo, Timo Hamalainen

W-FINA-S7: Security and Privacy - Room 5

1. Protecting Access Pattern Privacy in Database Outsourcing Service
   Hue Thi Bach Pham, Thuc Dinh Nguyen, Thuy Thi Bich Dong, Echizen Isao, Wohlgemuth Sven

2. Privacy Enhanced and Computationally Efficient HSK-AKA LTE Scheme
   Khodor Hamandi, Imad Sarji, Ali Chehab, Imad H. Elhajj, Ayman Kayssi

3. A Client Privacy Preserving Discovery Service Scheme
   Zhipeng Wang, Hong Zhu

4. Privacy Obfuscation with Bloom Filter for Effective Advertisement
   Ryuga Uda

W-FINA-S8: Internet Computing and Web Applications - Room 6

1. A Novel Web Synchronization Method for Supporting Smooth Web Communication
   Kazuyuki Tasaka, Takashi Ozu, Akira Idoue

2. An M2M Data Analysis Service System based on Open Source Software Environments
   Shinji Kitagami, Moriki Yamamoto, Hisao Koizumi, Takuo Suganuma

3. A Virtual Campus Tour Service using Remote Control Robots on Robot Service Network Protocol
   Toshiyuki Kusu, Yuka Ito, Takaaki Kida, Tetsuya Shimada, Masahiko Takahashi, Yuta Nomoto, Yosuke Tsuchiya, Masahiko Narita, Yuka Kato

W-HWISE-S7: VANETs and Mobile Networks - Room 7

1. A Protocol for Authentication with Multiple Levels of Anonymity (AML) in VANETs
   Bhuradiya Bhavesh N, Soumyadev Maji, R. C. Hansdah

2. Behavioral Mobility Model with Geographic Constraints
   Razvan Beuran, Shinsuke Miwa, Yoichi Shinoda

3. A Priority Based Differentiation for Contention Mechanism in Legacy DCF Method
   Sanjay K. Dhurandher, Isaac Woungang, Sahil Sharma, Veeresh Goswami

W-HWISE-S8: Cellular Networks and LTE Systems - Room 8

1. Mobility-Sensitive Power Control for MBSFN Cellular Networks
   Konstantinos Asimakis, Christos Bouras, Vasileios Kokkinos, Andreas Papazois

2. Toward Green Mobility in Femtocell Networks
   Aicha Ben Salem, Kaouthar Setom Ben Reguiga

3. Vertical Handover Decision Policy based on the End User’s Perceived Quality of Service
   Sassi Maaloul, Mertiem Ajjf, Sami Tabbane

4. Effects of Signaling Attacks on LTE Networks
   Ramzi Bassil, Imad H. Elhajj, Ali Chehab, Ayman Kayssi
W-SMME-S1: Social Media and Mobile Services in Enterprises - Room 9

1. Usage of Social Media for external Stakeholder Relationship Management & A Study of German Companies and international Non-Government Organizations
   Nina Kruger, Linh Dang-Xuan, Anna-Maria Schneider, Stefan Stieglitz

2. Adoption of Social Media for Internal Usage in a Global Enterprise
   Stefan Stieglitz, Siegfried Schallenmüller, Christian Meske

3. Accessing Knowledge with a Game & a Meta-analysis of Prediction Markets
   Christian W. Scheiner, Philipp Hoas, Niklas Leicht, Kai-Ingo Voigt

4. Specification of mCRM Enterprise Applications to Support IT-Consultants
   Tobias Brockmann, Stefan Stieglitz

W-CCSI-S2: Security Issues and Service Computing in Clouds - Plenary Room

1. A DDoS Mitigation System with Multi-Stage Detection and Text-Based Turing Testing in Cloud Computing
   Vincent Shi-Ming Huang, Robert Huang, Ming Chiang

2. A Secure Shared Group Model of Cloud Storage
   Ching-Hung Yeh

3. Secure Picture Data Partitioning for Cloud Computing Services
   Rene Leistikow, Djamshid Tavangarian

4. The Cloud Streaming Service Migration in Cloud Video Storage System
   Yi-Hsing Tsai
Tuesday, March 26, 2012

08:00 Registration

09:00-10:30 Single Session: Keynote II

IEEE AINA 2013 Keynote Talk II

Prof. Antonio Skarmeta:
The Impact of Internet of Things in Big Data Approach and Future Internet

10:30-11:00 Coffee Break

11:00-12:30 Parallel Sessions

AINA-S17: Wireless Sensor Network Applications - Room 1

1. Implementing Adaptation and Reconfiguration Strategies in Heterogeneous WSN
   Antinisca Di Marco, Francesco Gallo, Orhan Gemikonakli, Leonardo Mostarda, Franco Raimondi

2. Detecting energy-efficient central nodes for cooperative caching in wireless sensor networks
   Nikos Dimokas, Dimitrios Katsaros

   Muhamad Felamban, Basem Shihada, Kamran Jamshaid

4. Using MIMO Techniques to Enhance Communication Among Static and Mobile Nodes in Wireless Sensor Networks
   Marco Antonio Marques Marinho, Edison Pignaton de Freitas, Joao Paulo Carvalho Lustosa da Costa, Andre Lima Ferrer de Almeida, Rafael Timoteo de Sousa Junior

AINA-S18: Cloud and Services Computing - Room 2

1. An evolutionary approach for SLA-based cloud resource provisioning
   Victor Ion Munteanu, Teodor-Florin Fortis, Viorel Negru

2. Does live migration of virtual machines cost energy?
   Anja Strunk, Waltenegus Dargie

3. CloudServ: PaaS resources provisioning for service-based applications
   Sami Yangui, Samir Tata

AINA-S19: Secure Schemes and Privacy - Room 3

1. Secret Sharing Scheme Suitable for Cloud Computing
   Satoshi Takahashi, Keiichi Iwamura

2. Privacy-Preserving Distributed Decision Tree Learning with Boolean Class Attributes
   Hiroaki Kikuchi, Kouichi Itô, Mebae Ushida, Hiroshi Tsuda, Yaji Yamaoka

3. A Privacy Preserving Prediction-based Routing Protocol for Mobile Delay Tolerant Networks
   Omar Hasan, Jingwei Miao, Sonia Ben Mokhtar, Lionel Brunie
W-FINA-S9: Routing and Communication Protocols - Room 4
1. The Impact of Content Oriented Routing on OpenFlow Burst Switched Optical Networks
   Mohammed M. Saeed Abdullah Al-Momin, John Cosmas
2. Routing Protocol Based on the Position, Velocity, and Direction of the Nodes
   Gil Eduardo de Andrade, Luiz Augusto de Paula Lima, Alcides Calsavara, Carlos Alberto Maziero
3. Comparison of Three Interpolation Techniques In Comb-Type Pilot-Assisted Channel Coded OFDM System
   Latif Ullah Khan, Zeeshan Sabir, Sahibzada Ali Mahmud, Gul Muhammad Khan

W-FINA-S10: Multimedia Networking and Applications - Room 5
1. CCN-TV: a data-centric approach to real-time video services
   Vincenzo Ciancaglini, Giuseppe Piro, Riccardo Loti, Luigi Alfredo Grieco, Luigi Liquori
2. Continuous usage intention of videoconferencing software: A case study of one-to-some online courses
   Tai-Tien Lin, Kuo-Lun Hsiao, Hsiu-Sen Chiang, Ching-Ting Huang
3. Feedback Capacity of Different Complex Network Models
   Ghufran Al-Shiridah, Khaled Mahdi, Maytham Safar

W-HWISE-S9: Cognitive Radio Networks and WiFi - Room 6
1. A novel learning-based spectrum sensing technique for Cognitive Radio Networks
   Mehmet E. Aydin, Ghazanfar A. Safdar, Nauman Aslam
2. Quantifying the Multiple Cognitive Radio Interfaces Advantage
   Muhammad Talal Hassan, Ejaz Ahmed, Junaid Qadir, Adeel Baig
3. A proposal of traffic model that allows estimating Throughput mean values
   Cesar Hernandez, Luis F. Pedraza, Camila Salgado
4. On the Design of Energy-Aware 3G/WiFi Heterogeneous Networks Under Realistic Conditions
   Sireen Taleb, Mohamad Dia, Jamal Farhat, Zaher Dawy, Hazem Hajj

W-HWISE-S10: Wireless Networks Modeling and Performance Evaluation - Room 7
1. The inter-cell interference suppression algorithm based on the JP-CoMP and performance simulation
   Weihong Fu, Lili Ma, Cheng Wang, Qingliang Kong, Weizin Tian
   Sandra Frei, Woldemar Fuhrmann, Bogdan Ghita
3. Decoupling losses for end-to-end bandwidth guarantees in interdomain traffic
   Fernando Fernandez-Valdes Pedrosa, Manuel Fernandez Veiga, Candido Lopez Garcia, Andres Suarez Gonzalez
4. Metropolitan Spectrum Survey in Bogota Colombia
   Luis Fernando Pedraza, Felipe Forero, Ingrid Paez

W-CCPI-S1: Cloud Projects - Room 8
1. A Cloud-based framework for collaborative data management in the VPH-Share Project
   Siegfried Benkner, Chris Borckholder, Marian Bubak, Yuriy Kaniovskyi, Richard Knight, Martin Koehler, Spiros Koulouzis, Piotr Nowakowski, Steven Wood
2. Integrating Structured Peer-to-Peer Networks into OM4SPACE Project
   Irina Astrowa, Arne Koschel, Leonard Renners, Thomas Rossow, Marc Schaal
3. COMPOSE: A journey from the Internet of Things to the Internet of Services
   Benny Mandler, Fabio Antonelli, Robert Kleinfeld, Carlos Pedrinaci, David Carrera, Alessio Gugliotta, Daniel Schreckling, Iacopo Carreras, Dave Raggett, Marc Pous, Carmen Vicente Villares, Vlad Trifa
W-PITSaC-S1: Management and Governance of Smart Cities - Room 9
1. Scripting a Smart City: the CityScripts experiment in Santander
   Davide Carboni, Antonio Pintus, Andrea Piras, Alberto Serra, Atta Badii, Marco Tismann
2. A Living Smart City: Dynamically Changing Nodes Behavior Through Over the Air Programming
   Jose A. Galache, Pablo Sotres, Juan R. Santana, Veronica Gutierrez, Luis Sanchez, Luis Munoz
3. Architecture for smart highway real time monitoring
   Felix Jesus Villanueva, Javier Albusac, Luis Jimenez, David Villa, Juan Carlos Lopez

W-WReCS-S1: Fault Tolerance and Dependable Devices - Plenary Room
1. Fault Tolerance on NoCs
   J.M. Montanana, D de Andres, F. Tirado

12:30-14:00 Lunch Break

14:00-15:30 Parallel Sessions

AINA-S20: Pervasive and Ubiquitous Computing - Room 1
1. Reducing Congestion for Routing Algorithms in Opportunistic Networks with Socially-Aware Node Behavior Prediction
   Radu Ioan Ciobanu, Ciprian Dobre, Valentin Cristea
2. Feedback-based Adaptation for Improved Power Consumption
   Christos Bouras, Vaggelis Kapoulas, Georgios Kioumourtzis, Kostas Stamos, Nikos Stathopoulou, Nikos Tavoularis
3. Wide Area Seamless Surveillance Video System to Recognize and Track Moving Objects Based on Gigabit Network
   Takuma Kon, Yoshitaka Shibata, Noriki Uchida, Koji Hashimoto
4. Performance Evaluation of OLSR and AODV Protocols in a VANET Crossroad Scenario
   Evjola Spaho, Makoto Ikeda, Leonard Barolli, Faos Xhafa, Muhammad Younas, Makoto Takizawa

AINA-S21: Wireless Mesh and Sensor Networks - Room 2
1. Maximization of Wireless Mesh Networks Survivability to Assure Service Continuity under Intelligent Attacks
   Yu-Shun Wang, Frank Yeong-Sung Lin, Chi-Hsiang Chan, Jing-Wei Wang
   Kiyotaka Oe, Akiy Koyama, Leonard Barolli
3. Lightweight Source Authentication Mechanisms for Group Communications in Wireless Sensor Networks
   Wafa Ben Jaballah, Mohamed Mosbah, Habib Youssef, Akka Zemmari
   Muhammad Akhlaq, Tarek R. Sheltami, Elhadi M. Shokshuki
AINA-S22: Cloud Computing and Applications - Room 3

1. An Efficient Grouped Virtual Mapreduce Cluster
   Yang Yang, Xiang Long, Bo Jiang

   Feng-Cheng Lin, Lan-Kun Chang, Wen-Yuan Ku, Lin-Ru Chu, Tien-Yin Chou

3. Scaling MapReduce Applications across Hybrid Clouds to Meet Soft Deadlines
   Michael Mattess, Rodrigo N. Calheiros, Rajkumar Buyya

4. h-MapReduce: A Framework for Workload Balancing in MapReduce
   VenkataSwamy Martha, Weizhong Zhao, Xiaowei Xu

W-FINA-S11: Mobile Networks and Applications - Room 4

1. Android SMS Malware: Vulnerability and Mitigation
   Khodor Hamandi, Ali Chehab, Imad H. Elhajj, Ayman Kayssi

2. A Multi-Class Mobility Model for Dynamic & Dependable Systems
   Peter Bull, Georgios Antonopoulos, Lin Guan, Xingang Wang, Xunli Fan

3. Technical Challenges in Providing Remote Health Consultancy Services for the Unreached Community
   Eiko Kai, Ashir Ahmed

4. A Markov Chain Based Model for Congestion Control in VANETs
   M. A. Benatia, L. Khoukki, M. Esseghir, L. Merghem Boulahia

W-FINA-S12: Scalable, Intelligent, and Autonomic Computing - Room 5

   Dilawaer Duolikun, Hiroyuki Hama, Ailixier Aikebaier, Tomoya Enokido, Makoto Takizawa

2. Green and Secure Office Space Using Near Field Coupling Communication System
   T. Yanagawa, K. Nagata, M. Nozawa, T. Nakamura, Y. Kado

3. Runtime Change of Collaboration Patterns in Autonomic Systems: Motivations and Perspectives
   Giacomo Cabri, Nicola Capodieci

W-ICAES-S1: Intelligent Systems and Applications - Room 6

   Philip Moore, Cain Evans, George Tadros

2. Implementation of a FIPA compliant BDI agent platform in .NET: CloudNetBDI 1.0
   Cain Evans, Salameh Abu Rmeileh

3. iMAS: an Intelligent Mobile Advertising System: Development and Implementation
   C. Evans, P. Moore, A. M. Thomas, O. Pavlenko

4. eMonitoring for eHealth: Research Projects for Assisted Living

W-EOOPS-S1: Accelerators and GPU Computing - Room 7

1. Evaluation of Java for General Purpose GPU Computing
   Jorge Docampo, Sabela Ramos, Guillermo L. Taboada, Roberto R. Exposito, Juan Tourino, Ramon Doallo

2. Object support for OpenMP-style programming of GPU clusters in Java
   Carolin Wolf, Georg Dotzler, Ronald Veldema, Michael Philippson

3. A Multi-GPU Framework for In-Memory Text Data Analytics
   Poh Kit Chong, Ettikan K. Karuppiah, Keh Kok Yong
W-CCPI-S2: Cloud Programming and Management - Room 8
1. Programming ecological niche modeling workflows in the Cloud
   Daniele Lezzi, Roger Rafanell, Erik Torres, Renato De Giovanni, Ignacio Blanquer, Rosa M. Badia
2. From Cloud Governance to IoT Governance
   Adrian Copie, Teodor-Florin Fortis, Victor Ion Munteanu, Viorel Negru
3. A Proposal of a Simulation-based Approach for Service Level Agreement in Cloud
   Massimiliano Rak, Antonio Cuomo, Umberto Villano
4. Multi-objective Decision Support for Brokering of Cloud SLA
   Alba Amato, Salvatore Ventcinque

W-PITSaC-S2: Semantic Web, Visualization, Interoperability & Interaction - Room 9
1. A Unified View on Data Path Aspects for Sensing Applications at a Smart City Scale
   Vangelis Gazis, Martin Strohbach, Navot Akiva, Maximilian Walther
2. Semantic-based Knowledge Dissemination and Extraction in Smart Environments
   Michele Ruta, Floriano Scioscia, Eugenio Di Sciascio, Domenico Rotondi, Salvatore Piccione
3. RFID Tracking for urban transportation using EPCGlobal-based WebServices
   Jose Ivan San Jose Vieco, Jose Manuel Pastor Garcia, Roberto Zangroniz Cantahvana, Juan Jose de Dios de Dios
4. Enabling Participative Marketing through the Internet of Things
   Antonio J. Jara, Maria Concepcion Parra, Antonio F. Skarmeta

W-WReCS-S2: Reconfigurable Systems - Plenary Room
1. Research of PE Array Connection Network for Cool Mega-Array
   Rie Uno, Nobuaki Ozaki, Hideharu Amano
   Jorge Hiraiwa, Hideharu Amano
3. A circuit division method for High-Level synthesis on Multi-FPGA systems
   Daiki Kugami, Hideharu Amano, Takaaki Miyajima

15:30-16:00 Coffee Break

16:00-17:30 Parallel Sessions

AINA-S23: Network Protocols and Algorithms - Room 1
1. QoS-driven Autonomic Abilities through a Multi-homed Transport Protocol
   Code Diop, Emna Mezghani, Ernesto Exposito, Christophe Chassot, Khalil Drira
2. An Extended Multimedia Quorum-based Synchronization Protocol
   Tadateru Ohkawara, Azizier Askebaier, Tomoya Enokido, Makoto Takizawa
3. A Sender Side Algorithm for Handling Retransmission Timeouts of TCP NewReno over Multi-hop Wireless Networks
   Prasanthi S., Meejeong Lee, Sang-Hwa Chung
AINA-S24: Grid and Ad-hoc Platforms - Room 2

1. Processing HDF5 Datasets on Multi-core Architectures
   Rajdeep Bhowmik, Jessica Hartog, Madhusudhan Govindaaraju

2. On System Time Analysis for BitTorrent with Sharing Ratio Enforcement
   Yuh-Jzer Joung, Evan Chang

3. Nature Inspired Self organization for Adhoc Grids
   Tariq Abdullah, Ashiq Anjum, Koen Bertels, Nik Bessis, Stelios Sotiriadis

4. A Multilateration-based Localization Scheme for Adhoc Wireless Positioning Networks used in Information-oriented Construction
   Naoki Miwa, Shigeaki Tagashira, Hirooki Matsuda, Takanori Tsutsui, Yutaka Arakawa, Akira Fukuda

AINA-S25: Vehicular Networks and Applications - Room 3

1. An Advanced Vehicle Collision Warning algorithm over the DSRC Communication Environment
   Chung-Ming Huang, Shih-Yang Lin

2. Arrival time based Traffic Signal Optimization for Intelligent Transportation Systems
   Vamsi Paruchuri, Sriram Chellappan, Rathinasamy B. Lenin

3. Design and Implementation of Enhanced Asset Locating System for Vehicle Pooling in a Port Terminal
   Sanghyun Son, Youngjoon Park, Yunju Baek

4. Bit-Rate Selection in Multi-Vehicular Networks
   Giyeong Son, Paul A.S. Ward

W-FINA-S13: Pervasive and Ubiquitous Computing - Room 4

1. 3D-to-2D Projection Algorithm for Remote Control using Smartphone
   Ali Fahmi Perwira Negara, Budhi Prayoga, Ardiansyah, Jongmin Song, Deokjai Choi, Youngchul Kim

2. A recommendation exchange protocol between smart devices in pervasive computing environment
   Naima Iltaf, Abdul Ghafoor, Usman Zia

3. A Configurable and Extensible Security Service Architecture for Smartphones
   Dennis Titze, Philipp Stephanow, Julian Schatte

4. Simulating reader-to-reader interference in RFID systems
   Renato Ferrero, Filippo Gandino, Linchao Zhang, Bartolomeo Montrucchio, Maurizio Rebaudengo

W-FINA-S14: Intrusion Detection and Malware Analysis - Room 5

1. A study on practices against malware in free software projects
   Ignacio Colomina, Robert Clariso, Joan Arnedo-Moreno

2. MCF: MultiComponent Features for Malware analysis
   Vinod P., Vijay Lasmi, M.S.Gaur, Smita Naval, Parvez Faruki

3. Modelling Attacker with Deciding Security Properties by Induction and Deduction
   Yoney Kirsal-Ever, Aogezie Eneh, Orhan Gemikonakli, Leonardo Mostarda

4. Network Data Visualization Using Parallel Coordinates Version of Time-tunnel with 2Dto2D Visualization for Intrusion Detection
   Yoshihiro Okada
W-EOOPS-S2: MPI and Algorithms - Room 7
1. Promoting Data-Centric Supercomputing to the WWW World: Open MPI’s Java Bindings
   Alexey Cheptsov
2. CUDA Powered User-Defined Types and Aggregates
   Marcin Gorawski, Michal Lorek, Anna Gorawska
3. Distributed Gröbner bases computation with MPJ
   Heinz Kredel
4. Straightforward parallelization of polynomial multiplication using parallel collections in Scala
   Raphael Jolly

W-CCPI-S3: Semantics in Cloud - Room 8
1. A Semantic Registry for Cloud Services
   Cristina Mindruta, Teodor-Florin Fortis
2. Semantic and Agent Technologies for Cloud Vendor Agnostic Resource Brokering
   Alba Amato, Giuseppina Cretella, Beniamino Di Martino, Salvatore Venticinque
3. A Framework for Semantic Interoperability over the Cloud
   Flora Amato, Antonino Mazzeo, Vincenzo Moscato, Antonio Picariello

W-PITSaC-S3: Novel Protocols and Benchmarking for Smart Cities - Room 9
1. Design of Geographically Aggregatable Address and Routing toward Location Based Multicast
   Kazuya Okada, Takeshi Okuda, Suguru Yamaguchi
2. An Extended Topic-based Pub/Sub Broker for Cooperative Mobile Services
   Augusto Morales, Ramon Alcarria, Edwin Cedeo, Tomas Robles
3. Benchmarking Internet of Things deployments in Smart Cities
   Franck Le Gall, Sophie Vallet Chevillard, Alex Gluhak, Zhang Xueli
4. Mobile Discovery: A Global Service Discovery for the Internet of Things
   Antonio J. Jara, Pablo Lopez, David Fernandez, Jose F. Castillo, Miguel A. Zamora, Antonio F. Skarmeta

W-WReCS-S3: Energy Efficient Computing Systems - Plenary Room
1. Proposal of Sensor Data Gathering with Single Board Computer
   Katuyoshi Matsumoto, Motoi Yamagiwa, Minoru Uehara, Hideki Mori
2. Interactive Interface for Web-based Programming Environment
   Hideaki Yanagisawa, Kayo Kondou
   Motoi Yamagiwa, Katuyoshi Matsumoto, Minoru Uehara

19:00-21:00 Welcome Reception Party
Wednesday, March 27, 2012

08:00 Registration

09:00-10:30 Single Session: Keynote III

IEEE AINA-2012 Keynote Talk III

TBA TBA

10:30-11:00 Coffee Break

11:00-12:30 Parallel Sessions

AINA-S26: Web Applications - Room 1

1. Efficient Near-Optimal Dynamic Content Adaptation Applied to JPEG Slides Presentations in Mobile Web Conferencing
   Habib Louafi, Stephane Coulombe, Umesh Chandra
2. A Deliberative Agent for Meeting Scheduling
   S. M. Mozammal Hossain, Elhadi M. Shakshuki
3. A Recommendation Cascade for e-learning
   James Buncle, Rachid Anane, Minoru Nakayama
4. Combining collaborative filtering and clustering for implicit recommender system
   Simon Renaud-Depatter, Tengke Xiong, Shengrui Wang

AINA-S27: Cloud and Services Computing - Room 2

1. Adding Monitoring and Reconfiguration Facilities for Service-based Applications in the Cloud
   Mohamed Mohamed, Djamel Belad, Samir Tata
2. Scheduling of Sporadic Tasks with Deadline Constrains in Cloud Environments
   Florin Pop, Ciprian Dobre, Valentin Cristea, Nik Bessis
3. Reliable and Available Data Replication Planning for Cloud Storage
   Joolahluk Janpet, Yean-Fu Wen
4. Cloud-Aware Middleware
   Tercio de Morais Sampaio Silva, Diego Liberalquino Soares Lima, Nelson Souto Rosa

AINA-S28: Network Performance and Modeling - Room 3

1. Using Multiple Links Simultaneously to Increase Capacity for Multi-homed Terminals in Heterogeneous Wireless Networks
   Allen L. Ramaboli, Olabisi, E. Falowo, Anthony H. Chan
2. A New Binomial Conservative Multiplicative Cascade Approach for Network Traffic Modeling
   Jefferson Wilian de Godoy Stenico, Lee Luan Ling
3. EDCA 802.11e performance under different scenarios
   Santiago Cristoba Perez, Higinio Alberto Zacchini, Gustavo Mercado, Luis Bisaro, Javier Campos
4. Efficient Power Allocation for Video over Superposition Coding
   Chun Pong Lau, Kamran Jamshaid, Basem Shihada
**W-EASyCoSe-S1: Secure Systems - Room 4**

   **Xun Li, Frederic T. Chong**

2. Energy Consumption Simulation of Different Distributed Intrusion Detection Approaches  
   **Mauro Migliardi, Alessio Merlo**

   **Jordi Nin, Sergio Ricciardi**

**W-EASyCoSe-S2: Grid and Distributed Systems - Room 5**

1. Decentralized Consensus Protocols: the enabler for Smarter Grids Monitoring  
   **Antonio Iacoviello, Vincenzo Loia, Antonio Pietrosanto, Alfredo Vaccaro**

2. Modeling Energy Savings for Job Migration in Grid Environments  
   **Antonella Galizia, Mark Yampolskiy, Michael Schiffer, Alfonso Quarati, Andrea Clematis**

3. CPNoC: An Energy-Efficient Photonic Network-on-chip  
   **Junhui Wang, Gang Han, Baoliang Li, Jia Lu, Wenhua Dou**

4. Smart Distributed System Architecture for Green Communications  
   **Anna Vizziiello, Lorenzo Favalli**

**W-PAMS-S1: Multi-homing Environments - Room 6**

1. Design and Implementation of the NorNet Core Research Testbed for Multi-Homed Systems  
   **Thomas Dreibholz, Ernst Gunnar Gran**

2. Network Topology Inference from End-to-End Unicast Measurements  
   **Amir Malekzadeh, Mike H. MacGregor**

3. Multipath Video Streaming Based on Hierarchical Routing Management  
   **Thomas Volkert, Manuel Osdoba, Andreas Mitschele-Thiel, Martin Becke**

4. Non-Renegable Selective Acknowledgments (NR-SACKs) for MPTCP  
   **Fan Yang, Paul Amer**

5. Mitigating Receiver’s Buffer Blocking by Delay Aware Packet Scheduling in Multipath Data Transfer  
   **Golam Sarwar, Roksana Boreli, Emmanuel Lochin, Ahlem Mfidaoui**

**W-BICom-S1: Fuzzy and Neural Networks Systems - Room 7**

1. A Fuzzy-based Trustworthiness System for P2P Communications in JXTA-Overlay Considering Positive and Negative Effects  
   **Kouhei Umezuki, Evjola Spaho, Leonard Barolli, Makoto Ikeda, Fatos Xhafa, Makoto Takizawa**

2. On-Line Signature Evaluation Using Fuzzy Set Theory  
   **Jungpil Shin, Tomomi Kikuchi**

   **Qi Wang, Leonard Barolli, Elis Kulla, Gjergji Mino, Makoto Ikeda, Makoto Takizawa**

4. Using Artificial Neural Network for Automatic Assessment of Video Sequences  
   **Ekobo Akoa Brice, Simeu Emmanuel, Lebowsky Fritz**

**W-SMPE-S1: Secure Systems - Room 8**

1. SWIFT: A Secure Web Domain Filter in Hardware  
   **Vlado Altmann, Jens Rohrbeck, Jan Skodzik, Peter Danielis, Dirk Timmermann, Maik Roennau, Matthias Ninnemann**

2. A Practical Steganographic Approach for Matroska based High Quality Video Files  
   **Nikolaos Pitropakis, Costas Lambrinoudakis, Dimitris Geneiatakis, Dimitris Gritzalis**
3. A Scheme for the Generation of Strong IC-Metrics based Session Key Pairs for Secure Embedded System Applications
   Ruhma Tahir, Huosheng Hu, Dongbing Gu, Klaus McDonald-Maier, Gareth Howells
4. Toward mobile authentication with keystroke dynamics on mobile phones and tablets
   Matthias Trojahn, Frank Ortmeier
5. Analysis of the forensic traces left by AirPrint in Apple iOS devices
   Luis Gomez-Miralles, Joan Arnedo-Moreno

W-PITSaC-S4: Security and Privacy - Room 9
1. HIP security architecture for the IP-based Internet of Things
   Francisco Vidal Meca, Jan Henrik Ziegeldorf, Pedro Moreno Sanchez, Oscar Garcia Morchon, Sandeep S. Kumar, Sye Loong Keoh
2. Differential Elliptic Point Addition in Twisted Edwards Curves
   Leandro Marin

W-NetMM-S1: Network and Service Monitoring - Plenary Room
1. Passive Testing on Performance Requirements of Network Protocols
   Xiaoping Che, Stephane Maag
2. Adkintun: SLA monitoring of ISP broadband offerings
   Javier Bustos-Jimenez, Victor Ramiro, Felipe Lalanne, Tomas Barros
3. An Effective Attack Detection Approach in Wireless Mesh Networks
   Felipe Barbosa Abreu, Anderson Morais, Ana Cavalli, Bachar Wehbi, Edgardo Montes de Oca

12:30-14:00 Lunch Break

14:00-15:30 Parallel Sessions

AINA-S29: Multimedia Applications - Room 1
1. Intelligent Urban Video Surveillance System for Automatic Vehicle Detection and Tracking in Clouds
   Yi-Ling Chen, Tse-Shih Chen, Tsiao-Wen Huang, Liang-Chun Yin, Shiou-Yau Wang, Tzi-cker Chiueh
2. Adding Scent to Television Broadcasts by Using Closed Caption Data
   Tatsuki Tatara, Makoto Kikkawa, Ken-ichi Okada
3. Group Based Traffic Shaping for Adaptive HTTP Video Streaming
   Bjorn J. Villa, Poul E. Heegaard
4. Early Evaluation of Automatic Flying Distance Measurement on Ski Jumper’s Motion Monitoring System
   Nobuyoshi Sato, Tsuyoshi Takayama, Yoshitoshi Murata

AINA-S30: Distributed Database - Room 2
1. Object-Based Semantic Partitioning for XML Twig Query Optimization
   Norah Saleh Alghamdi, Wenny Rabaya, Eric Pardede
2. Efficient Processing of Updates for Moving Objects with Varying Speed and Direction
   Yuan-Ko Huang, I-Fang Su, Lien-Fu Lin, Yu-Chi Chung
3. PSCAN: A Parallel Structural Clustering Algorithm for Big Networks in MapReduce
   Weizhong Zhao, VenkataSwamy Martha, Xiaowei Xu
4. An analysis of players and bots behaviors in MMORPG
   Yutaro Mishima, Kensuke Fukuda, Hiroshi Esaki

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AINA-S31: Internet and Web Applications - Room 3

1. Performance Analysis and Comparison of Different DNS64 Implementations for Linux, OpenBSD and FreeBSD
   Gabor Lencse, Sandor Repas
2. Context-Aware and Cloud Based Adaptation of the User Experience
   Tor-Morten Gronli, Jarle Hansen, Gheorghita Ghinea, Muhammad Younas
3. Internet Metaobject Protocol (IMOP): Weaving the Global Program Grid
   Stefan Hong, Yuh-Jzer Joung
4. Towards the 3D Web with Open Simulator
   Iain Oliver, Alan Miller, Colin Allison, Sarah Kennedy, Lisa Dow, Anne Campbell, Chris Davies, John McCaffery

W-EASyCoSe-S3: Wireless and Mobile Networks - Room 4

1. Energy Consumption of the Mobile Wireless Sensor Network’s Node with Controlled Mobility
   Konstantin Mikhailov, Jouni Tervonen
2. Estimation of the energy consumption of mobile sensors in WSN environmental monitoring applications
   M. D’Arienzo, M. Iacono, S. Marrone, R. Nardone
3. Energy Efficient Double Cluster Head Routing Scheme in a City Vehicular Network
   Hamdi Idjmayyel, Bilal R.Qazi, Jaafar M.H. Elmirghani
4. Reducing Energy Cost of Keepalive Messages in 3G Mobiles
   Oulmahdi Mohamed, Chassot Christophe, Exposito Ernesto

W-EASyCoSe-S4: Data Centers and Algorithms - Room 5

1. Cluster Head Assignment in Networks controlled by Gateway Entities (CHANGE)
   Juan Rico, Javier Valino, Edgar Epifanio
2. An Extension of the Link Layer Discovery Protocol for On-Demand Power Supply Network by PoE
   Masaya Yokohata, Tomotaka Maeda, Yasuo Okabe
3. All Silicon Data Center, the Energy Perspectives
   Antonio Scarfo
4. Energy-Aware Cache Management for Content-Centric Networking
   Satoshi Imai, Kenji Leibnitz, Masayuki Murata

W-MAW-S1: Data Mining and Social Networks - Room 6

1. Mining Online Book Reviews for Sentimental Clustering
   Eric Lin, Shiaofen Fang, Jie Wang
2. Mining Botnet Behaviors on the Large-scale Web Application Community
   Daniel Garant, Wei Lu
3. Detecting Local Events by Analyzing Spatiotemporal Locality of Tweets
   Takuya Sugitani, Masumi Shirakawa, Takahiro Hara, Shojiro Nishio
4. Two-Phase Genetic Algorithm for Social Network Graphs Clustering
   Jan Kohout, Roman Neruda
W-BICom-S2: Biometric-Based and Swarm Intelligence Algorithms - Room 7

1. A Biometric-Based User Authentication Scheme for Heterogeneous Wireless Sensor Networks
   Ashok Kumar Das, Bezawada Bruhadeshwar

2. Information Splitting Using Crypto-biometrics Approach
   Marek R. Ogiela, Lidia Ogiela

3. A Comprehensive Study of Bluetooth Fingerprinting-based Algorithms For Localization
   Li Zhang, Xiao Liu, Jie Song, Cathal Gurrin, Zhiliang Zhu

4. Ant Colony based Forwarding Method for Content-Centric Networking
   Chengming Li, Kouji Okamura, Wenjing Liu

W-SMPE-S2: Privacy, Vulnerability, and Trust Computing - Room 8

1. Bidirectional Private Policy Matching based on Additively Homomorphic Encryption Systems
   Momoko Aoyama, Fumihiro Mori, Hirofumi Yamaki

2. Integration of Privacy Protection Mechanisms in Location-Based Services
   Gianluca Dini, Pericle Perazzo

3. Determining Home Users’ Vulnerability to Universal Plug and Play (UPnP) Attacks
   Shadi Esnaashari, Ian Welch, Peter Komisarczuk

4. Reputation Scoring System Using an Economic Trust Model
   Marat Vyshegorodtsev, Daisuke Miyamoto, Yasushi Wakahara

W-PITsSAC-S5: Smart Cities and Internet of Things Applications - Room 9

1. Validating a Business Model Framework for Smart City Services: The Case of FixMyStreet
   Nils Walravens

2. Building automation and smart cities: An integration approach based on a service-oriented architecture
   Markus Jung, Jurgen Weidinger, Wolfgang Kastner, Alex Olivieri

3. A Variability Model for Template Personalization in Mobile Prosumer Environments
   Ramon Alcarria Garrido, Tomas Robles Valladares, Augusto Morales Dominguez, Sergio Gonzalez-Miranda, Daniel Caballero

4. Smart Lighting solutions for Smart Cities
   Miguel Castro, Antonio Jara, Antonio Skarmeta

W-NetMM-S2: Management of Distributed Systems and Network - Plenary Room

1. Enabling IPTV Service Assurance using OpenFlow
   Patrick McDonagh, Cristian Olaria, Adriana Hava, Christina Thorpe

2. A study on a distributed rerouting scheme
   Ilir Shinko, Yoann Fouquet, Dritan Nace

3. Encrypted Incremental Backup without Server-Side Software
   Shih-Yu Lu

   Abul Bashar

15:30-16:00 Coffee Break

16:00-17:30 Parallel Sessions
AINA-S32: Mobile Networking Applications - Room 1

1. Microscale Analysis on Sensing Devices and Its Impact on Assessing User Mobility
   *Hyun Soon Kim, Eugene Kim, Hwantae Kim, Hwangnam Kim*

2. Energy-Efficient Mobile P2P Communications Based on Context Awareness
   *Satoshi Miyake, Masaki Bandai*

3. Enhancing the Modelling of Vertical Handover in Integrated Cellular/WLAN Environments
   *Yonal Kirsal, Enver Ever, Glenford Mapp, Orhan Gemikonakli*

4. HBPR: History Based Prediction for Routing in Infrastructure-less Opportunistic Networks
   *Sanjay K. Dhurandher, Deepak Kumar Sharma, Isaac Woungang, Shruti Bhati*

AINA-S33: MANETs - Room 2

1. A Routing Method for Top-k Query Processing in Mobile Ad Hoc Networks
   *Daichi Amagata, Yuya Sasaki, Takahiro Hara, Shojiro Nishio*

2. Investigation of AODV Throughput Considering RREQ, RREP and RERR Packets
   *Elis Kulla, Makoto Ikeda, Leonard Baroli, Fatos Xhafa, Muhammad Younas, Makoto Takizawa*

3. A Novel Power Aware Heterogeneous Routing Protocol for MANETs
   *Haidar Safa, Marcel Karam, Bassam Moussa*

4. Investigation of OLSR Behavior for Different Hello Packets Intervals in a MANET Testbed
   *Masahiro Hiyama, Elis Kulla, Makoto Ikeda, Leonard Baroli, Makoto Takizawa*

AINA-S34: Database and Data Mining - Room 3

1. Mining Normal and Abnormal Class-Association Rules
   *Phan-Luong Viet*

2. IC-BIDE: Intensity Constraint-based Closed Sequential Pattern Mining for Coding Pattern Extraction
   *Hiromasa Takei, Hayato Yamana*

3. Advance Resource Provisioning in Bulk Data Scheduling
   *Mehmet Balman*

4. Empowering Data Placement for Ad-hoc Queries in Mobile Broadcast Environments
   *Agustinus Borgy Waluyo, David Taniar, Bala Srinivasan*

W-EASyCoSe-S5: Job Scheduling and Environment Sensing - Room 4

1. Smart Outlet Network for Energy-aware Services Utilizing Various Sensor Information
   *Naoyuki Morimoto, Yuu Fujita, Masaaki Yoshida, Hiroyuki Yoshimizu, Masafumi Takiyamada, Terukazu Akehi, Masami Tanaka*

2. The Potential of Energy/Utility-Accrual Scheduling
   *Marcus Hahnel, Marcus Volp, Bjorn Dobel, Hermann Hartig*

3. Deriving Job Completion Reliability and Job Energy Consumption for a General MapReduce Infrastructure from Single-Job Perspective
   *Jia-Chun Lin, Fang-Yie Leu, Ming-Chang Lee, Ying-ping Chen*

W-BLSMC-S1: Bioinformatics and Life Science Modeling and Computing - Room 5

1. MitomiRs and energetic regulation
   *J. Demongeot, O. Cohen, A. Doncescu, A. Henrion-Caued*

2. MicroRNAs: unspecific inhibitory regulation in immunologic control and in mitochondrial respiration
   *Jacques Demongeot, Hesgui Hana, N. Villerme*
3. Data mining based analysis of genomic location shifts of conserved annotated miRNA genes gives preliminary insights on molecular network evolution
   Frederic Michon

4. Dynalets: a new representation of periodic biological signals and spectral data
   Jacques Demongeot, Ali Hamie, Antonio Glaria, Carla Taramasco

5. Information design of biological networks: application to genetic, immunologic, metabolic and social networks
   Jacques Demongeot, Hermann Pempelfort, Juan Manuel Martinez, Reinaldo Vallejos, Marta Barria, Carla Taramasco

W-MAW-S2: Data Modeling and Web Applications - Room 6

1. Document Modeling using Syntactic and Semantic Information
   Emilie Au, Mohamed Bougaissa, Shengrui Wang

2. Foreign Exchange Trading Rules using a Single Technical Indicator from Multiple Timeframes
   Shangkun Deng, Akito Sakurai

3. A general purpose model for future prediction based on web search data: Predicting Greek and Spanish election
   Spyros Polykalas, George Prezerakos, Agisilaos Konidaris

4. A Feasibility Study on using Low-Cost Gaming Devices for Rehabilitation
   Kin Fun Li, Ana-Maria Sevcenco

5. A Novel Web Service for Mammography Images Indexing
   Alfonso Farruggia, Rosario Magro, Salvatore Vitabile

W-BICom-S3: Intelligent Algorithms and Systems - Room 7

1. Performance Evaluation of WMN-GA System for Node Placement in WMNs Considering Normal Distribution of Mesh Clients and Different Selection and Mutation Operators
   Admir Barolli, Tetsuya Oda, Evjola Spaho, Leonard Barolli, Fatos Xhafa, Makoto Takizawa

2. How to compare and interpret two learnt Decision Trees from the same Domain
   Petra Perner

3. Improvements the Seccomp sandbox based on PBE theory
   Ma Bo, Mu Dejun, Fan Wei, Hu wei

4. Estimate thermo-physical parameters from characterization of the building materials by using artificial intelligence
   Thanh Nga Thai

W-SMPE-S3: Network and Communication Technologies - Room 8

1. Behavior Ontology: A Framework to Detect Attack Patterns for Security
   Sujeong Woo, Jinha On, Moonkun Lee

2. Petri-Net Based User Profile Data Ontology for SNS
   Hwa-Young Jeong, Jong-Hyuk Park, Young-Sik Jeong, Doo-Soon Park

3. A Two-tier Overlay Publish/Subscribe System for Sensor Data Stream Using Geographic Based Load Balancing
   Tatsuya Fukui, Satoshi Matsuura, Atsuo Inomata, Kazutoshi Fujikawa

W-PITSaC-S6: Intelligent Transport Systems and Health in the IoT - Room 9

1. Parking easier by using context information of a Smart City
   Juan Rico, Juan Sancho, Bruno Cendon, Miguel Camus
2. Extension of the ITS Station Architecture to Low-Power Pervasive Sensor Networks  
   Laszlo Virag, Jozsef Kovacs, Andras Edelmayer

3. Improving Service Quality for Parking Lot Users Using Intelligent Parking Reservation Policies  
   Nikolaos Doulamis, Eftychios Protopapadakis, Lambros Lambrinos

4. Towards Ambient Assisted Cities and Citizens  
   Diego Lopez-de-Ipina, Bernhard Klein, Sucha Vanhecke, Jorge Perez-Velasco

5. Survey of Internet of Things technologies for clinical environments  
   Pablo Lopez, David Fernandez, Antonio J. Jara, Antonio F. Skarmeta

W-NetVE-S1: Networked Virtual Enterprises - Plenary Room

1. ARISTOTELE: A Semantic-driven Platform for Enterprise Management  
   Pierluigi Del Nostro, Francesco Orciuoli, Stefano Paolozzi, Pierluigi Ritrovato, Daniele Toti

2. Behavior Modeling in Virtual Organizations  
   Mahdieh Shadi, Hamideh Afsarmanesh

3. A Ontological Collaborative Framework for Business Process Integration  
   Minh Tuan Nguyen Hoang, Trung Van Nguyen, Hanh Huu Hoang

4. MAR-AODV: Innovative Routing Algorithm in MANET based on Mobile Agent  
   Cung Trong Cuong, Vo Thanh Tu, Nguyen Thuc Hai

19:00-21:00 Banquet Party
Thursday, March 28, 2012

08:00 Registration

09:00-10:30 Parallel Sessions

**AINA-S35: Network Control Algorithms and Systems - Room 1**

1. Wireless Fair Intelligent Admission Control - WFIAC  
   Fatima Furqan, Doan B. Hoang
2. Comparing OpenFlow Controller Paradigms Scalability: Reactive and Proactive  
   Marcial Porto Fernandez
3. An Efficient TCAM Update Scheme for Packet Classification  
   Yeim-Kuan Chang, Kai-Yang Liu

**AINA-S36: P2P Systems - Room 2**

1. An Efficient Peer-to-Peer Semantic Overlay Network for Learning Query Routing  
   Taoufik Yefery, Khedija Arour, Amel Bouzeghoub
2. Using ontologies to build testbed for Peer-to-Peer Information Retrieval Systems  
   Saloua Zammali, Khedija Arour, Amel Bouzeghoub
3. Management of Streaming Multimedia Content using Mobile Agent Technology on Pure P2P-based Distributed e-Learning System  
   Masayuki Higashino, Tadafumi Hayakawa, Kenichi Takahashi, Takao Kawamura, Kazunori Sugahara
4. Locality-Awareness in Multi-Channel Peer-to-Peer Live Video Streaming Networks  
   Navid Bayat, Hamid R. Rabiee, Mostafa Salehi

**AINA-S37: Mobile Database and Modeling - Room 3**

1. Data gathering considering geographical distribution of data values in dense mobile wireless sensor networks  
   Kazuya Matsuo, Keisuke Goto, Akimitsu Kanzaki, Takahiro Hara, Shojiro Nishio
2. Indexing of Spatiotemporal Objects in Indoor Environments  
   Sultan Alamri, David Taniar, Maytham Safar
3. Causality-Based Model For User Profile Construction From Behavior Sequences  
   Belgacem Chikhaoui, Shengrui Wang, Helene Pigot
4. Efficient Survey Database Construction Using Location Fingerprinting Interpolation  
   Ryosuke Kubota, Shigeaki Tagashira, Yataka Arakawa, Terasaki Kitasuka, Akira Fukuda

**W-TeNAS-S1: Network Technologies & Deployment and Performance - Room 4**

1. Analyzing Broadband Divide in the Farming Sector  
   Michael Jensen, Jose M Gutierrez, Jens M Pedersen
2. A Retrospective Analysis of QoS Deployment, Operation and Use in Enterprise and Provider Networks  
   Michael Mackay, Christopher Edwards
3. Performance Evaluation of Transmission Order Control on Relay Nodes in Multi-hop Wireless Networks  
   Kentaro Kameyama, Hiroyuki Koga, Masayoshi Shimamura, Yataka Fukuda, Takeshi Ikenaga
4. Client Buffering Considerations for Video Streaming  
   Rubem Pereira, Ella Pereira
W-COLLABES-S1: Business Modelling and Enterprise Systems - Room 5

1. An Approach to Enterprise Collaboration through Concurrent Scene Understanding and Interoperation
   John Mashford

   Kam-Yiu Lam, Joseph K. Ng, Jian-Tao Wang

3. Personal Analytics as a Factor of Change in Enterprise Communication and Collaboration Patterns
   Serguei Dobrinevski

4. E-Commerce and B2B Services Enterprises
   Polina Pauska, Natalia Kryvinska, Christine Strauss

5. Experience in Developing Concurrent Inferences on a De-regulated Supply Chain Network
   Paul Moynihan, Wei Dai

W-DMWPC-S1: Data Management for Wireless and Ubiquitous Systems - Room 6

1. Strategies for Enhancing Data Quality in Mobile CRM
   Richard Hable, Thomas Aglassinger

2. On Scheduling Real-time Multi-item Queries in Multi-RSU Vehicular Ad Hoc Networks (VANETs)
   G. G. Md. Nawaz Ali, Edward Chan, Wenzhong Li

3. A basic study of data collection ratio of drifting sensor networks for monitoring waterways
   Kazuma Mitake, Susumu Ishihara

4. A method for establishing routes and IPv6 addressing based on the estimated distance from neighboring nodes in wireless mesh networks
   Yuta Maruoka, Kazunori Ueda

W-iCCI-S1: Inter-Clouds Environments - Room 7

1. A Deadline Scheduler for Jobs in Distributed Systems
   Quentin Perret, Gabriel Charlemagne, Stelios Sotiriadis, Nik Bessis

2. Towards inter-cloud simulation performance analysis: Exploring service-oriented benchmarks of clouds in SimIC
   Stelios Sotiriadis, Nik Bessis, Nick Antonopoulos

3. Reputation guided Genetic Scheduling Algorithm for Independent Tasks in Inter-Clouds Environments
   Florin Pop, Valentin Cristea, Nik Bessis, Stelios Sotiriadis

4. Intercloud Architecture Framework for Heterogeneous Cloud based Infrastructure Services Provisioning On-Demand
   Yuri Demchenko, Canh Ngo, Cees de Laat, Joan Antoni Garcia-Espin, Sergi Figuerola, Juan Rodriguez, Luis Contreras, Giada Landi, Nicola Ciulli

W-IWDENS-S1: Disaster Information Networks - Room 8

1. Directional Antenna Control based Mobile Adhoc Network
   Toshihiro Suzuki, Yoshitaka Shibata, Kazuo Takahata, Noriki Uchida

2. Disaster Information Network based on Software Defined Network Framework
   Yuto Sekin, Noriki Uchida, Yoshitaka Shibata, Norio Shiratori

3. Development of Smartphone Application for Off-line Use in Case of Disaster
   Hiroaki Yuze, Yuzhe Qian, Naoyoshi Suzuki
10:30-11:00 Coffee Break

11:00-12:30 Parallel Sessions

**AINA-S38: QoS Mechanisms - Room 1**

1. A Multi-Factors Cell Selection Scheme for Heterogeneous Networks with Multimedia Traffic  
   Wen-Ching Chung, Chung-Ju Chang, Chih-Yuan Hsieh, Yung-Han Chen

2. An effective QoS Providing Mechanism Using Prediction-based Decentralized Routing  
   Abutaleb Abdelmohdi Turky, Clemens H. Cap

3. A QoS-Aware Uplink Scheduling Paradigm for LTE Networks  
   Haidar Safa, Wassim El-Hajj, Kamal Tohme

   Juyoung Park, Jaemyoun Lee, Junhee Ryu, Heonshik Shin, Shin Heu, Kyungtae Kang

**AINA-S39: Trustworthy Computing - Room 2**

1. FeelTrust: Providing Trustworthy Communications in Ubiquitous Mobile Environment  
   Giuliana Carullo, Aniello Castiglione, Giuseppe Cattaneo, Alfredo De Santis, Ugo Fiore, Francesco Palmieri

2. Dispositional Trust Adaptation in User-Centric Networks  
   Carlos Ballester Lafuente, Jean-Marc Seigneur

3. Multi-Criteria IaaS Service Selection based on QoS History  
   Zia ur Rehman, Omar Khadeer Hussain, Farookh Khadeer Hussain

**AINA-S40: Communication Networks and Applications - Room 3**

1. A Short introduction to Synchronous Communication  
   Michel Raynal

2. A Multicast Retransmission Scheme Using Negative ACK in Wireless Networks  
   Tsang-Ling Sheu, San-Tai Lin

   Toru Osuga, Takayoshi Asakura, Kunihiro Taniguchi

4. On the effectiveness of multi-criteria decision mechanisms for vertical handoff  
   Carlos Ramirez-Perez, Victor M. Ramos R.

**W-TeNAS-S2: Applications and Algorithms - Room 4**

1. Sensor Data Processing Method Based on Observed Person’s Similarity for Motion Estimation  
   Shintaro Imai, Mariko Miyamoto, Yoshikazu Arai, Toshimitsu Inomata

2. Designing a testbed for broadcast opportunistic wireless data dissemination protocols  
   Nasif Muslim, Florian Pregizer

3. A Machine Learning Algorithm for Searching Vectorised RDF Data  
   Asaad Sabah Hadi, Paul Fergus, Chelsea Dobbins, Abbas Muhsin Al-Bakry

4. Design and Implementation of Real-Time Flow Viewer Across Different Domains  
   Wun-Yuan Huang, Jen-Wei Hu, Ta-Yuan Chou, Te-Lung Liu
W-COLLABES-S2: Cloud Computing and Emerging Trends - Room 5

1. A Generic Logging Template for Infrastructure as a Service Cloud  
   Winai Wongthai, Francisco Liberal Rocha, Aad van Moorsel

2. An SLA ontology to support service discovery in future cloud markets  
   Giuseppe Petralia, Giuseppe Di Modica, Orazio Tomarchio

3. Routing over Relaxed Triangulation Structures for P2P-based Virtual Environments  
   Elyia Buyukkaya, Maha Abdallah

4. A Novel Workflow Management System for Handling Process Adaptation and Compliance  
   Mohamad Saiful Haji Omar, Paul Chung, Christian W Dawson

W-DMWPC-S2: Data Management Analysis - Room 6

1. System Design for Estimating Social Relationships from Sensing Data  
   Akihiro Kida, Ryoichi Shinkuma, Hiroyuki Kasai, Kazuhiro Yamaguchi, Oscar Mayora, Tatsuro Takahashi

2. Social Link Analysis using Wireless Beaconing and Accelerometer  
   Kazuto Shimizu, Masayuki Iwai, kaoru Sezaki

3. Data Mining and Analysis of Large Scale Time Series Network Data  
   Patricia Morreale, Steve Holtz, Allan Goncalves

W-iCCI-S2: Methods and Tools for Cloud Computing - Room 7

1. An agent-based architecture and a two-phase protocol for the data portability in clouds  
   Meriem Thabet, Mahmoud Boufaida

2. Energy-Aware Social-based Routing in Opportunistic Networks  
   Cristian Chilipirea, Andreea-Cristina Petre, Ciprian Dobre

3. User-side Personalization Considering Privacy Preserving in Cloud Systems  
   Leila Sharifi, Maryam Heidari Beisafar

W-IWDENS-S2: Disaster Information Systems - Room 8

1. Proposal of Delay Tolerant Network with Cognitive Wireless Network for Disaster Information Network System  
   Noriki Uchida, Norhiro Kawamura, Nicholas Williams, Kazuo Takahata, Yoshitaka Shibata

2. Self Power Supplied Micro Wireless Ballooned Network for Disaster Recovery  
   Saneatsu Arimura, Noriki Uchida, Yoshitaka Shibata

3. Using Workflow Management Systems to Improve Disaster Response Processes  
   Marlen Hofmann, Stefan Sackmann, Hans Betke

12:30-14:00 Lunch Break