

PROGRAM GUIDE



CISIS-2013

The 7th International Conference on
Complex, Intelligent and Software Intensive Systems

and



IMIS-2013

The 7th International Conference on
Innovative Mobile and Internet Services in Ubiquitous Computing

July 3rd - July 5th, 2013

Asia University

Taichung, TAIWAN

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Keynote I

Prof. Felix Wu, UC Davis, USA

Ubiquitous Computing Leveraging Online Social Informatics

Abstract: This talk is concerning human relationship, interactions, and value between the information content and the structural properties of online social networks. And, how will this affect the paradigm of Ubiquitous Computing. We view the online social network as a vehicle for propagating information (or innovations) of various kinds in supporting human/relationship-centric computation. Depending on the available structural topology (or the structure of overlapping communities), some information might get propagated much faster/wider, while other information might never be practically accessible by most of the population. Thus, it is valuable to develop a computational model to analyze and leverage the information content's value according to the integration of social and information networks. Furthermore, the "value" of social informatics can be used, as an alternative, to determine the outcome of ubiquitous computing. The possible applications following this principle include discovery of community interests and inter-dependency analysis between information content and human relationship. We will discuss how contents might possibly affect the structural properties of online social networks under different models of social capital.

Keynote II

Prof. S.S. Iyengar, Florida International University, USA

Next Generation Sensor Networks: Sensor Data Collection Current Art and Future Perspective

Abstract: In the developing world, mobile phone penetration is often more than 50%. New automobiles are often connected to global networks. This has changed the type and scale of sensor networking applications that are feasible. This article discusses a sampling of current research prototypes. Example applications are given for science, government, industry, and consumer electronics applications. This sampling shows how distributed sensing is changing the way we live; it also points to changes that can be anticipated in the near future. This talk presents an overview on the challenges involved in the design and deployment of sensors and for modeling of information topological structure.

Keynote III

Dr. Santi Caballe, Open University of Catalonia, SPAIN

Intelligent software systems in support for enhancing and improving the on-line collaborative learning experience

Abstract: Collaborative learning systems often lack the challenging resources and tools required to fully support collaborations, making the experience unattractive to end-users and discouraging progression. Whilst the learner might expect to control the collaborative experience, often it is the collaborative experience that controls and limits the learner. As a result, collaborative learning resources can lack authentic interactivity, user empowerment and balanced levels of challenge, thus having a negative effect in learner motivation and engagement. In order to overcome these deficiencies, in this talk I will propose a range of advance intelligent systems that virtualize the live collaborative sessions and produce interactive and attractive resources to be experienced and played by learners during the collaboration. Learners can observe how avatars discuss and collaborate, how discussion threads grow, and how knowledge is constructed, refined and consolidated. Furthermore, learners can interact with these systems in order to modify some parameters observing the consequences and assessing their understanding. The research reported in this talk was undertaken within the European Framework 7 project ALICE (Adaptive Learning via Intuitive/Interactive, Collaborative and Emotional Systems).

Keynote IV

Prof. Stephen S. Yau, Arizona State University, USA

Situation Awareness in Applications of Services and Cloud Computing

Abstract: Applications of services and cloud computing often require situation awareness for better QoS, including usability, adaptability and security, due to the dynamic environment and changes of users requirements. During the past decade, rapid advances of mobile and embedded device technologies as well as services and cloud computing have made computing anytime, anywhere and more reachable than ever. Users now can access computing resources over the Internet from various mobile and stationary computing devices with the support of services and cloud computing infrastructures. Substantial research has been done to develop techniques to incorporating situation awareness in various applications of services and cloud computing, including service discovery, composition, and execution, system monitoring and adaptation, authentication and access control as well as context discovery, acquisition and dissemination, situation analysis and recognition.

In this keynote, challenges, current state of the art and future research directions on situation awareness in applications of services and cloud computing will be discussed.

Welcome Message from CISIS-2013 General Co-Chairs

Welcome to the 7-th International Conference on Complex, Intelligent and Software Intensive Systems. The conference will be held at Asia University, Taichung, Taiwan from July 3-5, 2013. The aim of the conference is to deliver a platform of scientific interaction between the three interwoven challenging areas of research and development of future ICT-enabled applications: Software Intensive Systems, Complex systems and Intelligent Systems.

Software Intensive Systems are systems which heavily interact with other systems, sensors, actuators, devices, other software systems and users. More and more domains are involved with software intensive systems, e.g. automotive, telecommunication systems, embedded systems in general, industrial automation systems and business applications. Moreover, the outcome of web services delivers a new platform for enabling software intensive systems. The conference is thus focused on tools, practically relevant and theoretical foundations for engineering software intensive systems.

Complex Systems Research is focused on the overall understanding of systems rather than its components. Complex Systems are very much characterized by the changing environments in which they act and by their multiple internal and external interactions. They evolve and adapt through internal and external dynamic interactions. The development of Intelligent Systems and agents, which is each time more characterized by the use of ontologies and their logical foundations build a fruitful impulse for both Software Intensive Systems and Complex Systems. Recent research in the field of intelligent systems, robotics, artificial intelligence, and cognitive sciences are important factor for the future development and innovation of software intensive and complex systems.

The CISIS 2013 is aiming at delivering a forum for in-depth scientific discussions amongst the three communities. The papers included in the proceedings cover all aspects of theory, design and application of complex systems, intelligent systems and software intensive systems. The conference received 213 papers and accepted 49 papers (about 23% acceptance rate), which were selected after a careful review process.

The organization of an International Conference requires the support and help of many people. A lot of people have helped and worked hard to produce a successful CISIS 2013 technical program and conference proceedings. First, we would like to thank all the authors for submitting their papers, the Program Committee Members, and the reviewers who carried out the most difficult work by carefully evaluating the submitted papers. We are grateful to Honorary Co-Chairs Prof. Shian-Shyong Tseng, Asia University, Taiwan and Prof. Makoto Takizawa, Hosei University, Japan.

We would like to thank Dr. Hsing-Chung Chen, Asia University, Taiwan, Prof. Antonio F. Skarmeta Gomez, University of Murcia, Spain and Dr. Farookh Hussain, University Technology Sidney, Australia as CISIS 2013 PC Co-Chairs for their efficient and timely work. This year in conjunction with CISIS 2013 we have 12 International Workshops that complemented CISIS 2013 program with contributions for specific topics. We would like to thank the Workshop Co-Chairs: Prof. Minoru Uehara, Toyo University, Japan, Dr. Salvatore Vitabile, University of Palermo, Italy, Dr. Philip Moore, Birmingham City University, UK and Dr. Ming-Hsiang Huang, Asia University, Taiwan and all workshops organizers for organizing these workshops. We thank Dr. Makoto Ikeda and Mr. Masahiro Hiyama, Fukuoka Institute of Technology for their excellent work and support as Web Administrators with the Web Submission and Management System of conference.

Finally, we would like to thank the Local Arrangement team of Asia University for their support and good local arrangement for the conference. We hope you will enjoy the conference and have a great time in Taichung, Taiwan.

CISIS-2013 General Co-Chairs

Leonard Barolli, Fukuoka Institute of Technology, Japan
Fatos Xhafa, Technical University of Catalonia, Spain

Welcome Message from CISIS 2013 Program Committee Co-Chairs

Welcome to the 7-th International Conference on Complex, Intelligent and Software Intensive Systems (CISIS 2013). The conference will be held from July 3 to July 5, 2013 at Asia University, Taichung, Taiwan in conjunction with IMIS 2013 International Conference. This is the 7-th edition of the CISIS international conference which has consolidated the conference as an important international event in the interconnected fields of Complex Systems, Intelligent Systems, and Software Intensive Systems. The goal of the conference is to bring together researchers from the different fields whose work is related to the above three challenging areas of ICT-enabled applications.

The CISIS 2013 conference edition was organized in 15 research tracks. The objective was to address and cover each main theme of the Software Intensive Systems, Complex Systems, and Intelligent Systems with a specific research track. The program for this conference is the result of hard and excellent work of many people, including authors, external reviewers, program committee members, track chairs, and conference officers. This year, we have selected 49 quality contributions among 213 papers received (about 23% acceptance rate). We believe that all of these papers not only provide novel ideas, new results, work in progress, and state-of-the-art techniques in this field, but also stimulate future research activities in the area of Complex Systems, Intelligent Systems, and Software Intensive Systems.

A lot of people have helped and worked hard to produce a successful CISIS 2013 event. We would like to express our sincere appreciation to all of them for their cooperation in completing the conference program under a very tight schedule. Firstly, we would like to thank CISIS 2013 General Co-Chairs: Prof. Leonard Barolli, and Prof. Fatos Xhafa, for bringing together this important event. We are grateful to Honorary Co-Chairs: Prof. Shian-Shyong Tseng, Asia University, Taiwan and Prof. Makoto Takizawa, Hosei University, Japan. We would like to give special thanks to all Track Co-Chairs for their time, energy, and expertise to make CISIS 2013 very successful. Also, we thank the Program Committee Members and Reviewers for their hard work and their valuable comments that improved the quality of the presented papers. Last but not least, we would like also to thank Dr. Makoto Ikeda and Mr. Masahiro Hiyama, Fukuoka Institute of Technology for their excellent work with the conference Web Site and Submission System management. Finally, we would like to thank the Local Arrangement Team of Asia University for their support and good local arrangement for the conference.

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

CISIS 2013 Program Committee Co-Chairs

Hsing-Chung Chen, Asia University, Taiwan
Antonio F. Skarmeta Gomez, University of Murcia, Spain
Farookh Hussain, University Technology Sidney, Australia

Welcome Message from the Workshops Co-Chairs of CISIS 2013 International Conference

Welcome to the Workshops of the 7-th International Conference on Complex, Intelligent and Software Intensive Systems (CISIS 2013) which will be held at Asia University, Taichung, Taiwan from July 3 to Jul 5, 2013. We are pleased that for this edition of CISIS International Conference we have 12 international workshops. Some of these workshops are in third, fourth, fifth and sixth editions. The objective was to complement as much as possible the main theme of CISIS 2013 with specific topics of different workshops in order to cover topics from the three challenging areas of ICT-enabled applications: Software Intensive Systems, Complex Systems and Intelligent Systems.

The list of workshops is as follows.

- The 7-th International Workshop on Engineering Complex Distributed Systems (ECDS 2013)
- The 6-th International Workshop on Engineering Parallel and Multi-Core Systems (ePaMus 2013)
- The 6-th International Workshop on Intelligent Interfaces for Human-Computer Interaction (IIHCI 2013)
- The 6-th International Workshop on Intelligent Informatics in Biology and Medicine (IIBM 2013)
- The 5-th International Workshop on Virtual Environment and Network-Oriented Applications (VENOA 2013)
- The 3-rd International Workshop on Intelligent Computing In Large-Scale Systems (ICLS 2013)
- The 3-rd International Workshop on Adaptive Learning via Interactive, Collaborative and Emotional approaches (ALICE 2013)
- The 3-rd International Workshop on Intelligent Context-Aware Systems (ICAS 2013)
- The 2-nd International workshop on Hybrid/Cloud Computing Infrastructure for e-Science Application (HCCIEA 2013)
- The 1-st International Workshop on Advances in Cooperative Communications, Relaying and Distributed MIMO (ACCORD 2013)
- The 1-st International Workshop on Intelligent Services with Communication Technologies (ISCT 2013)
- The 1-st International Workshop on Sustainable Education and Information Management in Tourism and Hospitality (SEIMTH 2013)

These workshops bring to the researchers conducting research in specific themes the opportunity to learn from this rich multi-disciplinary experience. The Workshop Co-Chairs would like to thank CISIS 2013 International Conference Organizers for their help and support. We are grateful to the workshops organizers for their great efforts and hard work in proposing the workshops, selecting the papers, the interesting programs and for the arrangements of the workshops during the conference days. We are grateful to Dr. Makoto Ikeda and Mr. Masahiro Hiyama, Fukuoka Institute of Technology, Japan for their excellent work and support as Web Administrators. We would like to give special thanks to the Local Organization Team of Asia University, Taichung, Taiwan.

We hope you enjoy the workshops programs and proceedings.

Workshops Co-Chairs of CISIS 2013 International Conference

Minoru Uehara, Toyo University, Japan
Salvatore Vitabile, University of Palermo, Italy
Philip Moore, Birmingham City University, UK
Ming-Hsiang Huang, Asia University, Taiwan

CISIS-2013 Conference Organizing Committee**Honorary Co-Chairs**

Shian-Shyong Tseng, Asia University, Taiwan
Makoto Takizawa, Hosei University, Japan

General Co-Chairs

Leonard Barolli, Fukuoka Institute of Technology, Japan
Fatos Xhafa, Technical University of Catalonia, Spain

Program Committee Co-Chairs

Hsing-Chung Chen, Asia University, Taiwan
Antonio F. Skarmeta Gomez, University of Murcia, Spain
Farookh Hussain, University Technology Sidney, Australia

Workshops Co-Chairs

Minoru Uehara, Toyo University, Japan
Salvatore Vitabile, University of Palermo, Italy
Philip Moore, Birmingham City University, UK
Ming-Hsiang Huang, Asia University, Taiwan

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Vincenzo Loia, University of Salerno, Italy
Yoshitaka Shibata, Iwate Prefectural University, Japan
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Albert Zomaya, University of Sidney, Australia

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Mei-Hua Liao, Asia University, Taiwan

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Nik Bessis, University of Derby, UK

Web Administrator Chair

Makoto Ikeda, Fukuoka Institute of Technology, Japan

Masahiro Hiyama, Fukuoka Institute of Technology, Japan

CISIS-2013 Conference Track Chairs

Track 1: Parallel Computing

Horacio Gonzalez-Velez, National College of Ireland, Ireland

Osamu Tatebe, University of Tsukuba, Japan

Heinz Kredel, University of Mannheim, Germany

Track 2: Database and Data Mining Applications

Hai Dong, Curtin University, Australia

Alfredo Cuzzocrea, Italian National Research Council, Italy

Hong Cheng, Chinese University of Hong Kong, China

Track 3: Artificial Intelligence and Agent Technology

Jorge J. Gomez Sanz, Universidad Complutense de Madrid, Spain

Mehdi Dastani, University of Utrecht, The Netherlands

Track 4: Multimedia Systems and Virtual Reality

Hiroaki Nishino, Oita University, Japan

Chih-Yang Lin, Asia University, Taiwan

Yi-Hui Chen, Asia University, Taiwan

Track 5: Systems for Biological and Medical Applications

Josep Pegueroles, Technical University of Catalonia, Spain

Hung-Chang Chen, Ching Kuo Institute of Management and Health, Taiwan

Ching-Chuan Wei, Chaoyang University of Technology, Taiwan

Track 6: E-learning and Groupware Systems

M. Antonia Martinez-Carreras, Universidad de Murcia, Spain

Olivia Fachrunnisa, UNISSULA Semarang, Indonesia

Track 7: Wireless Sensor, Ad Hoc and Mesh Networks

Hui-Kai Su, National Formosa University, Taiwan

Jorge Sa Silva, University Coimbra, Portugal

Akimitsu Kanzaki, Osaka University, Japan

Track 8: Semantic Web, Web Services and Data Integration

Sergei Dobrinski, Hypersoft, Germany

Fan Wang, Microsoft, USA

Track 9: Autonomic Computing and Communication

Whai-En Chen, National Ilan University, Taiwan

Gregorio Martinez, University of Murcia, Spain

Omer Rana, University of Cardiff, UK

Track 10: Socially Inspired Computing and Computational Intelligence

Juan A. Botia Blaya, Universidad de Murcia, Spain

Neil Y. Yen, The University of Aizu, Japan

Track 11: Security and Trusted Computing

Antonio Ruiz Martinez, Universidad de Murcia, Spain
Domenico Rotondi, TXT e-solutions SpA, Italy
Zhi-Hui Wang, Dalian University of Technology, China

Track 12: Energy Aware Information Systems

Tomoya Enokido, Risho University, Japan
Kuei-Ping Shih, Tamkang University, Taiwan

Track 13: Complex Systems and Software Modeling and Analytics

Olivier Terzo, Mario Boella Institute, Italy
Dominique Genoud, HESSO, Switzerland

Track 14: P2P & Grid Data Technologies

Omar Hussain, Curtin University, Australia
Saqib Ali, Sultan Qaboos University, Oman

Track 15: Adaptive and Evolvable Human Computer Interaction Interfaces

Hung-Chang Lin, National Taiwan Normal University, Taiwan
Kenzi Watanabe, Hiroshima University, Japan

Welcome Message from IMIS-2013 General Co-Chairs

Welcome to the Seventh International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing (IMIS 2013), which will be held from July 3 to July 5, 2013 at University of Asia, in Taichung, Taiwan. The IMIS-2013 is held in conjunction with the 7-th International Conference on Complex, Intelligent and Software Intensive Systems (CISIS 2013).

The IMIS 2013 International Conference focuses on the challenges and solutions for Ubiquitous and Pervasive Computing (UPC) with an emphasis on innovative, mobile and internet services. With the proliferation of wireless technologies and electronic devices, there is a fast growing interest in UPC. UPC enables to create a human-oriented computing environment where computer chips are embedded in everyday objects and interact with physical world. Through UPC, people can get online even while moving around, thus having almost permanent access to their preferred services. With a great potential to revolutionize our lives, UPC also poses new research challenges. The conference provides an opportunity for academic and industry professionals to discuss the latest issues and progress in the area of UPC.

The IMIS 2013 received many paper submissions from all over the world. The papers included in the proceedings cover important aspects from UPC research domain. This year, we received 201 submissions and after a careful review process of 3 independent reviews per submission, 50 papers were accepted (about 25% acceptance rate).

It is impossible to organize such a successful program without the help of many individuals. We would like to express our great appreciation to the authors of the submitted papers, the program committee members, who provided timely and significant reviews, and special session chairs for their great efforts. We are grateful to Honorary Co-Chairs: Prof. Jing-Pha Tsai, President, Asia University, Taiwan and Prof. Makoto Takizawa, Hosei University, Japan for their advices and support. We would like to thank Jong-Hyouk Lee, TELECOM Bretagne, France, Fang-Yie Leu, Tunghai University, Taiwan, Kangbin Yim, Soonchunhyang University, Korea, and Hsing-Chung Chen, Asia University, Taiwan as IMIS 2013 PC Co-Chairs for their efficient and timely work.

This year in conjunction with IMIS 2013 we have 10 International Workshops that complemented IMIS 2013 program with contributions for specific topics. We would like to thank the Workshop Co-Chairs Dr. Hae-Duck Joshua Jeong, Korean Bible University, Korea, Dr. Yung-Fa Huang, Chaoyang University of Technology, Taiwan, Dr. Aniello Castiglione, University of Salerno, Italy and Prof. Jyh-Horng Wen, Tunghai University, Taiwan and all workshop organizers for organizing these workshops.

We thank Dr. Makoto Ikeda and Mr. Tetsuya Oda, Fukuoka Institute of Technology, Japan for their excellent work and support as Web Administrators.

Finally, we would like to thank the members of the Local Arrangement Team of Asia University for their support and good local arrangement for the conference.

We hope that all of you enjoy IMIS 2013 and find this a productive opportunity to learn, exchange ideas and make new contacts.

IMIS-2013 General Co-Chairs

Ilsun You, Korean Bible University (KBU), Korea
Leonard Barolli, Fukuoka Institute of Technology (FIT), Japan
Fatos Xhafa, Technical University of Catalonia, Spain

Welcome Message from IMIS 2013 Program Committee Co-Chairs

As PC Co-Chairs, we would like to welcome you to the 7-th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing (IMIS 2013), which will be held from July 3 to July 5, 2013 at Asia University, Taichung, Taiwan in conjunction with the 7-th International Conference on Complex, Intelligent and Software Intensive Systems (CISIS 2013).

This is the 7-th edition of the IMIS International Conference, which is growing every year in quality and quantity. The goal of the conference is to bring together researchers from the different fields related to Ubiquitous and Pervasive Computing (UPC). The IMIS 2013 International Conference is organized in 13 research tracks, which address and cover each main theme of UPC with a specific set of research topics. The program for this conference is the result of hard and excellent work of many people, including authors, external reviewers, program committee members, track chairs, and conference officers. This year, we have selected 50 quality contributions among 201 papers received (about 25% acceptance rate). We believe that all of the papers selected not only provide novel ideas, new results, work in progress, and state-of-the-art techniques in this field, but also stimulate future research activities in the area of UPC.

As PC Co-Chairs, we would like to thank the many people that helped and worked hard to produce a successful IMIS 2013 event this year. We would like to express our sincere appreciation to all of them for their cooperation. Firstly, we would like to thank IMIS 2013 General Co-Chairs: Dr. Ilsun You, Prof. Leonard Barolli and Prof. Fatos Xhafa for bringing together this important event. We are grateful to Honorary Co-Chairs: Prof. Jing-Pha Tsai, President, Asia University, Taiwan and Prof. Makoto Takizawa, Hosei University, Japan for their advices and support. We would like to give special thanks to all Track Co-Chairs for their time, energy, and expertise to make IMIS 2013 very successful. Also, we thank the Program Committee Members and Reviewers for their hard work and valuable comments that improved the quality of the presented papers. We would like to give special thanks to Dr. Makoto Ikeda and Mr. Tetsuya Oda, Fukuoka Institute of Technology for their excellent work as Web Administrators. Finally, we would like to thank the Local Arrangement Team of Asia University for their support and good local arrangement for the conference.

We hope you will enjoy the conference and hope to see you in forthcoming editions.

IMIS-2013 Program Committee Co-Chairs

Fang-Yie Leu, Tunghai University, Taiwan
Hsing-Chung Chen, Asia University, Taiwan
Jong-Hyouk Lee, TELECOM Bretagne, France
Kangbin Yim, Soonchunhyang University, Korea

Welcome Message from Workshops Co-Chairs of IMIS 2013 International Conference

Welcome to the Workshops of the 7-th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing (IMIS 2013), which will be held from July 3 to July 5, 2013 at Asia University, Taichung, Taiwan in conjunction with the 7-th International Conference on Complex, Intelligent and Software Intensive Systems (CISIS 2013). This year we are proud to present 10 workshops, which will be held together with IMIS 2013. The objective was to complement as much as possible the main themes of IMIS 2013 with the specific topics of the different workshops to cover many topics of Ubiquitous and Pervasive Computing (UPC).

The list of workshops follows below:

- The 7-th International Workshop on Advances in Information Security (WAIS 2013)
- The 3-rd International Workshop on Mobile Commerce, Cloud Computing, Network and Communication Security (MCNCS 2013)
- The 3-rd International Workshop on Future Internet and Next Generation Networks (FIN-Net 2013)
- The 3-rd International Workshop on Advanced Communication Technologies and Applications to Intelligent transportation systems, Cognitive radios and Sensor networks (ACTICS-2013)
- The 3-rd International Workshop on Intelligent Techniques and Algorithms for Ubiquitous Computing (ITAUC 2013)
- The 3-rd International Workshop on Frontiers in Innovative Mobile and Internet Services (FIMIS 2013)
- The 3-rd International Workshop on Ad Hoc and Ubiquitous Computing (AHUC 2013)
- The 2-nd International Workshop on Sustainability Management of e-Business and Ubiquitous Commerce Engineering (SMEUCE 2013)
- The 2-nd International Workshop on Extending Seamlessly to the Internet of Things (esIoT 2013)
- The 1-st International Workshop on Practical Security Issues in Public Internet Services (PSIPIS-2013)

We would like to thank IMIS 2013 International Conference Organizers for their help and support. We are grateful to the workshop organizers for their great efforts and hard work in proposing the workshops, selecting the papers, organizing interesting programs, and for the arrangements of the workshops during the conference days.

We are grateful to Dr. Makoto Ikeda and Mr. Tetsuya Oda, Fukuoka Institute of Technology, Japan for their excellent work and support as Web Administrators. We would also like to give special thanks to the Local Organization Team of Asia University.

We hope you enjoy the workshops programs and proceedings.

Workshops Co-Chairs of IMIS 2013 International Conference Hae-Duck Joshua Jeong,
Korean Bible University, Korea
Yung-Fa Huang, Chaoyang University of Technology, Taiwan
Aniello Castiglione, University of Salerno, Italy
Jyh-Horng Wen, Tunghai University, Taiwan

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Makoto Ikeda, Fukuoka Institute of Technology, Japan

Tetsuya Oda, Fukuoka Institute of Technology, Japan

IMIS-2013 Conference Track Chairs

Track 1: Smart Spaces and Intelligent Environments

Mye Sohn, Sungkyungkwan University, Korea
Sung-Hwa Lim, Sungkyunkwan University, Korea

Track 2: Embedded Systems and Multicore for Cloud Computing

Chao-Tung Yang, TungHai University, Taiwan
Cho-Li Wang, University of Hong Kong, Hong Kong

Track 3: Context and Location-aware Computing

Ben-Jye Chang, National Yunlin University of Science and Technology, Taiwan

Track 4: Data Management in Pervasive Systems

Chyi-Ren Dow, Feng Chia University, Taiwan
Cheng-Min Lin, Nan Kai University of Technology, Taiwan

Track 5: Security, Trust and Privacy

Tianhan Gao, Northeastern University, China
Omar Hasan, INSA Lyon, France

Track 6: Energy Aware Pervasive Systems and Green Computing

Tomoya Enokido, Rissho University, Japan
Joanna Kolodziej, Cracow University of Technology, Poland

Track 7: Smart City and Disaster Resilient System

Noriki Uchida, Saitama Institute of Technology, Japan
Yoshitaka Shibata, Iwate Prefectural University, Japan
Nik Bessis, University of Derby, United Kingdom

Track 8: Smartphone Applications and Social Network Services for UPC

Zhuzhong Qian, Nanjing University, China
Yuan Wu, Zhejiang University of Technology, China

Track 9: Modeling, Simulation and Performance in UPC

Kashif Munir, Telecom Bretagne, France
Gwanggil Jeon, University of Incheon, South Korea

Track 10: Internet, Wireless and Mobile Networks for UPC

Yufang Chung, Tunghai University, Taiwan
Kun-Lin Tsai, Tunghai University, Taiwan

Track 11: Distributed System and Cloud Computing

LinPeng Huang, Shanghai Jiao Tong University, China
Shih-Hao Hung, National Taiwan University, Taiwan

Track 12: Innovative Services and Applications in UPC

Mohammed Mikki, Islamic University of Gaza, Palestinian Territories
Jalel Rejeb, San Jose State University, USA

Track 13: Intelligent Technologies and Applications on Big Data

Hanmin Jung, KISTI, Korea
Myunggwon Hwang, KISTI, Korea



CISIS-2013 Main Conference and Workshops Program

Wednesday, July 3, 2013

08:00 Registration

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

Keynote I

Chair: Fang-Yie Leu, Tunghai University, Taiwan

Prof. Felix Wu: Ubiquitous Computing Leveraging Online Social Informatics

10:30-11:00 Coffee Break

11:00-12:00 Single Session: Keynote II

Keynote II

Chair: Hsing-Chung Chen, Asia University, Taiwan

Prof. S.S. Iyengar: Next Generation Sensor Networks: Sensor Data Collection Current Art and Future Perspective

12:00-13:30 Lunch Break

13:30-15:00 Parallel Sessions

CISIS-S1: Ad-Hoc and Cognitive Radio Networks**Chair: Noriki Uchida, Saitam Institute of Technology, Japan**

1. Evaluation of Cognitive Wireless Based Delay Tolerant Network for Disaster Information System in a Rural Area
Noriki Uchida, Noritaka Kawamura, Yoshitaka Shibata
2. Performance Comparison of OLSR with ETX_Float and ETX_ff in a MANET Testbed
Masahiro Hiyama, Elis Kulla, Makoto Ikeda, Leonard Barolli, Makoto Takizawa
3. Waiting Probability Analysis for Dynamic Spectrum Access in Cognitive Radio Networks
Danda B. Rawat, Bhed B. Bista, Sachin Shetty, Gongjun Yan
4. Effect of AODV HELLO Packets for Different Mobility Degrees
Elis Kulla, Masahiro Hiyama, Makoto Ikeda, Leonard Barolli, Fatos Xhafa, Makoto Takizawa

CISIS-S2: Trust Management**Chair: Salvatore Vitabile, University of Palermo, Italy**

1. RECLAMO: Virtual and Collaborative Honeynets Based on Trust Management and Autonomous Systems Applied to Intrusion Management
Manuel Gil Perez, Veronica Mateos Lanchas, David Fernandez Cambronero, Gregorio Martinez Perez, Victor A. Villagra
2. Trust Management of Health Care Information in Social Networks
Pawat Chomphoosang, Yefeng Ruan, Arjan Durrresi, Mimoza Durrresi, Leonard Barolli
3. An Advanced Technique for User Identification Using Partial Fingerprint
V. Conti, G. Vitello, F. Sorbello, S. Vitabile

W-ACCORD-S1: Protocols and Algorithms for Cooperative Wireless Relay Networks**Chair: Cheng-Ying Yang, Taipei Municipal University of Education, Taiwan**

1. A Total Adaptive Power Allocation for Physical Layer Network Coding in Wireless Networks
Yung-Fa Huang, Tan-Hsu Tan, Shi-Yan Peng, Chia-Hsin Cheng
2. A Cooperative Bit-Map Routing Protocol in Ad Hoc Networks
Hsing-Chung Chen, Neng-Yih Shih, Rizki Noviyanto, Jui-Chi Chen
3. Downlink Relay Selection Algorithm for Amplify-and-Forward Cooperative Communication Systems
Cheng-Ying Yang, Yi-Shan Lin, Min-Shiang Hwang
4. A Four-Layers Hierarchical Clustering Topology Architecture with Sleep Mode in a Wireless Sensor Network
Young-Long Chen, Yi-Nung Shih, Jia-Sheng Lin

W-ISCT-S1: Intelligent Services**Chair: Yen-Wen Chen, National Central University, Taiwan**

1. A Sensor-Based Tracking System for Cyclist Group
Haw-Yun Shin, Fok-Leong Un, Kuo-Wei Huang
2. Genetic Algorithm-Based 3D Coverage Research in Wireless Sensor Networks
Lin Feng, Zhenlong Sun, Tie Qiu
3. The Graph Painting Mobile Game
Ching-I Hsin, I-Hsuan Peng

W-ePaMuS-S1: Real-Time Systems**Chair: Pao-Ann Hsiung, National Chung Cheng University, Taiwan**

1. Run-Time Monitoring Mechanism for Efficient Design of Application-Specific NoC Architectures in Multi/Manycore Era
Akram Ben Ahmed, Takayuki Ochi, Shohei Miura, Abderazek Ben Abdallah
2. Real-Time Object Detection for Multi-Camera on Heterogeneous Parallel Processing Systems
Chih-Sheng Lin, Shih-Meng Teng, Yen-Ting Chen, Pao-Ann Hsiung
3. An Efficient Task Placement Method for Reconfigurable FPGA Systems
Trong-Yen Lee, Nian-You Lin, Wei-Cheng Chen, Haixia Wu

15:00-15:30 Coffee Break**15:30-17:00 Parallel Sessions****CISIS-S3: Vehicular and Sensor Networks****Chair: Bhed Bahadur Bista, Iwate Prefectural University, Japan**

1. Performance Evaluation of OLSR Protocol in a Grid Manhattan VANET Scenario for Different Applications
Evjola Spaho, Makoto Ikeda, Leonard Barolli, Fatos Xhafa, Vladi Kolic, Makoto Takizawa
2. Performance Analysis of Wireless Sensor Networks for Different Speeds of Sink and Sensor Nodes
Tao Yang, Elis Kulla, Leonard Barolli, Gjergji Mino, Makoto Takizawa
3. An IVC Broadcast Scheme Based on Traffic Phase for Emergency Message Dissemination at Road Intersection
Guozhen Tan, Yong Yin, Junling Bu, Nan Ding
4. Allocation of Sensor Nodes Or Base Stations in Inhomogeneous Propagation Environments
Jun-Hyuck Lee, Masafumi Takematsu, Kazunori Uchida, Junichi Honda

CISIS-S4: Cloud and Cluster**Chair: Makoto Takizawa, Hosei University, Japan**

1. An Architecture for Parallelizing Fully Homomorphic Cryptography on Cloud
Ryan Hayward, Chia-Chu Chiang
2. A Cloud-Based Framework to Enhance Augmented Reality
Chung-Ting Kao, Kai-Yuan (Kevin) Jan, Rick C.S. Chen
3. Dynamic Clusters of Servers to Reduce Total Power Consumption
Takuro Inoue, Ailixier Aikebaier, Tomoya Enokido, Makoto Takizawa
4. The Evaluation of the Improved Redundant Power Consumption Laxity-Based (IRPCLB) Algorithm in Homogeneous and Heterogeneous Clusters
Tomoya Enokido, Ailixier Aikebaier, Makoto Takizawa

W-ACCORD-S2: Innovative Cooperative Communication Technologies**Chair: Jyh-Horng Wen, Tunghai University, Taiwan**

1. Using Back Propagation Neural Network for Channel Estimation and Compensation in OFDM Systems
Chia-Hsin Cheng, Yung-Pei Cheng, Yung-Pei Cheng, Wen-Ching
2. The Optimal Strategy of Direct/Cooperative Transmission in WLANs
Chien-Erh Weng, Lie Yang, Chien-Hsuan Chen, Jyh-Horng Wen
3. Application of Space-Time Coding in a Two-Hop Amplify-and-Forward Cooperative Network
Chung-Hua Chiang, Yung-Cheng Yao, Jyh-Horng Wen
4. Power Allocation for Multi-Relay Amplify-and-Forward Cooperative OFDM
Shu-Hong Lee, Yi-Yin Lin, Yung-Cheng Yao, Jyh-Horng Wen

W-ISCT-S2: Network Services and Applications**Chair: Yen-Wen Chen, National Central University, Taiwan**

1. Research on Task Allocation Strategy and Scheduling Algorithm of Multi-core Load Balance
Chao Wu, Yifu Wang, Aoyang Zhao, Tie Qiu
2. Implementation of Indoor VOC Air Pollution Monitoring System with Sensor Network
I-Hsuan Peng, Yen-Yin Chu, Cui-Yu Kong, Yu-Sheng Su
3. Improvement of Streaming Video in Differential Service Networks by Using Opportunity RED Mechanism
I-Hsuan Peng, Meng-Hsien Lin, Yen-Wen Chen, Fong-Ming Yang, Addison Y.S. Su

W-ePaMuS-S2: Engineering Parallel and Multi-core Systems**Chair: Fatos Xhafa, Technical University of Catalonia**

1. Hyper-Universal Switch Network for FPIC Design
Mao-Hsu Yen, Chu Yu, Yih-Hsia Lin, Chang-Hsien Chung

2. Low Complexity Digit-Serial Multiplier Over $GF(2^m)$ Using Karatsuba Technology
Trong-Yen Lee, Min-Jea Liu, Chia-Chen Fan, Chia-Chun Tsai, Haixia Wu
3. The Architecture of Parallelized Cloud-Based Automatic Testing System
Chorng-Shiuh Koong, Chih-Hsiung Shih, Chang-Chung Wu, Pao-Ann Hsiung

17:10-18:40 Single Session: Panel Discussion

Panel Discussion

19:00-21:00 Welcome Reception Party

Thursday, July 4, 2013

08:00 Registration

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

Chair: Fatos Xhafa, Technical University of Catalonia

Keynote III

Dr. Santi Caballe: Intelligent software systems in support for enhancing and improving the on-line collaborative learning experience

10:00-10:30 Coffee Break

10:30-12:00 Parallel Sessions

CISIS-S5: Fuzzy-Based Systems

Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan

1. A Fuzzy Clustering Approach for Determination of Ideal Points of New Products
Kit Yan Chan
2. An Integrated Fuzzy Logic System for Cluster-Head Selection and Sensor Speed Control in WSNs
Qi Wang, Elis Kulla, Gjergji Mino, Leonard Barolli, Jiro Iwashige
3. A Fuzzy-Based System to Evaluate the Peer Reliability in JXTA-Overlay P2P
Kouhei Umezaki, Evjola Spaho, Leonard Barolli, Fatos Xhafa, Valbona Barolli, Jiro Iwashige
4. Developing Mobile Intelligent System for Cattle Disease Diagnosis and First Aid Action Suggestion
Wiwik Anggraeni, A. Muklason, A.F. Ashari, A. Wahyu, Darminto

CISIS-S6: Multimedia Systems

Chair: Antonio Gentile, University of Palermo, Italy

1. Personalising Multi Video Streams and Camera Views for Live Events
Zhenchen Wang
2. A Specialized Architecture for Color Image Edge Detection Based on Clifford Algebra
Silvia Franchini, Antonio Gentile, Giorgio Vassallo, Filippo Sorbello, Salvatore Vitabile
3. Telerehabilitation Using Low-Cost Video Game Controllers
Kin Fun Li, Ana-Maria Sevcenco, Elaine Yan
4. Twitter Sentiment Mining: A Multi Domain Analysis
Saeideh Shahheidari, Hai Dong, Md Nor Ridzuan Bin Daud

W-ECDS-S1: Distributed Systems and Applications**Chair: Makoto Takizawa, Hosei University, Japan**

1. Reduction of Processing Overhead to Synchronize Multimedia Replicas
Ailixier Aikebaier, Tomoya Enokido, Makoto Takizawa
2. Requirements for Resilient Information and Communication Technology
Shoichi Senda, Kien Nguyen, Shigeki Yamada
3. Performance Analysis of WMNs Using Hill Climbing Algorithm Considering Normal and Uniform Distribution of Mesh Clients
Xinyue Chang, Tetsuya Oda, Evjola Spaho, Makoto Ikeda, Leonard Barolli, Fatos Xhafa
4. A Scalable Group Communication Protocol on P2P Overlay Networks
Dilawaer Duolikun, Ailixier Aikebaier, Tomoya Enokido, Makoto Takizawa
5. A Hybrid Method of User Privacy Protection for Location Based Services
Kenta Miura, Fumiaki Sato

W-SEIMTH-S1: Social Responsible Tourism**Chair: Chung-Hao Chen, Asia University, Taiwan**

1. The Cognition of Climate Change and Green Hotel
Feng-En Lo, Kuan-Ting Lin, Ko Lu Ma, Hsien-Yu Hsia
2. An Empirical Study on the Antecedents of Socially Responsible Consumption Behavior
Chia-Ju Lu
3. An Exploratory Study of Corporate Social Responsibility of Travel Agency Websites and Consumers' Low Carbon Travel Intention
Ma Chunjou, Sharon F.H. Pang

W-VENOA-S1: Innovative Applications I**Chair: Nobuo Funabiki, Okayama University, Japan**

1. Development of Hands-on IP Network Practice System with Automatic Scoring Function
Nobukazu Iguchi, Yuki Kitazawa
2. Design of NFC Based Micro-payment to Support MD Authentication and Privacy for Trade Safety in NFC Applications
Byungrae Cha, Jongwon Kim
3. A Modified Active Access-Point Selection Algorithm Considering Link Speed Change in IEEE 802.11n for Wireless Mesh Networks
Nobuo Funabiki, Sho Fujita, Toru Nakanishi, Kan Watanabe
4. Analyzing Text-Based User Feedback in e-Government Services Using Topic Models
Dahlan Nariman

12:00-13:30 Lunch Break**13:30-15:00 Parallel Sessions**

CISIS-S7: Mesh Networks**Chair: Makoto Ikeda, Fukuoka Institute of Technology, Japan**

1. Performance Evaluation of WMN-GA System for Node Placement in WMNs for Normal and Uniform Distributions of Mesh Clients Considering Different Grid Shapes
Tetsuya Oda, Admir Barolli, Evjola Spaho, Leonard Barolli, Fatos Xhafa
2. Analysis of WMN-GA Simulation Results: WMN Performance Optimizing the Number of Mesh Routers
Makoto Ikeda, Taiki Honda, Tetsuya Oda, Shinji Sakamoto, Xinyue Chang, Leonard Barolli
3. Performance Analysis of WMNs Using Simulated Annealing Algorithm for Different Temperature Values
Shinji Sakamoto, Tetsuya Oda, Elis Kulla, Makoto Ikeda, Leonard Barolli, Fatos Xhafa
4. Performance Evaluation of WMN-GA System for Node Placement in WMNs Considering Exponential and Weibull Distribution of Mesh Clients and Different Selection and Mutation Operators
Admir Barolli, Tetsuya Oda, Leonard Barolli, Fatos Xhafa, Makoto Takizawa, Petraq Papajorgji

CISIS-S8: Medical Applications**Chair: Salvatore Vitabile, University of Palermo, Italy**

1. A Semi-automatic Multi-seed Region-Growing Approach for Uterine Fibroids Segmentation in MRgFUS Treatment
Carmelo Militello, Salvatore Vitabile, Giorgio Russo, Giuliana Candiano, Cesare Gagliardo, Massimo Midiri, Maria Carla Gilardi
2. Developing a Self-Health Management System of Arterial Elasticity Based on Smart Phone
Ching-Chuan Wei, Yan-Zun Huang
3. The Design of Tunable Low Level Laser Stimulator
Zhong Zheng, Zhan-Chang Yuan, Chang-Wei Hsieh, Pei-Xuan Lin, Chi-Wen Lung
4. Simulate Human Visual Perception Using Expert Neurons
Horatiu Sachelarie

W-ALICE-S1: Adaptive and Collaborative Learning**Chair: Santi Caballe, Open University of Catalonia, Spain**

1. Management of Latent Learning Needs in Adaptive e-Learning Systems
Nicola Capuano, Saverio Salerno, Giuseppina Rita Mangione, Anna Pierri
2. Engaging e-learning for Risk Management: The ALICE Experience in Italian Schools
Nicola Capuano, Giuseppina Rita Mangione, Anna Pierri, Eric Lin
3. Prototyping a Cognitive Assessment System to Enrich the Virtualization of Collaborative Learning
Santi Caballe, Nestor Mora, Thanasis Daradoumis, David Ganan, Ian Dunwell, Anna Pierri
4. Information Security in Support for Mobile Collaborative Learning
Jorge Miguel, Santi Caballe, Josep Prieto

W-SEIMTH-S2: Strategic Development of Tourism and Hospitality Industry**Chair: Hsi-Peng Tseng, Asia University, Taiwan**

1. Balanced Scorecard in Hospitality
Shu-Chuan Liu, Chung-Hao Chen
2. Exploration of Destination Competitiveness Framework - City as a Destination
Hsi-Peng Tseng, Chung-Hao Chen
3. Understanding Pet Attachment and Happiness Linkages: The Mediating Role of Leisure Coping
Ta-Wei Tang, Chien-Chao Chen, Jung-Chi Chou

W-VENOA-S2: Virtual Reality and Multimedia**Chair: Kenzi Watanabe, Hiroshima University , Japan**

1. Automatic 3D Furniture Layout Based on Interactive Evolutionary Computation
Ryuya Akase, Yoshihiro Okada
2. Development of a WiFi Users' Information Indicating System with AR
Kenzi Watanabe, Masatoshi Imai, Hisaharu Tanaka, Makoto Otani
3. Building of Japanese Emotion Ontology from Knowledge on the Web for Realistic Interactive CG Characters
Kosuke Kaneko, Yoshihiro Okada
4. A Document Browser Based on a Book-Style Interface with Augmented Reality
Masatoshi Nishimura, Tsuneo Kagawa, Hiroaki Nishino, Kouichi Utsumiya

15:00-15:30 Coffee Break**15:30-17:00 Parallel Sessions****CISIS-S9: Telecommunication Systems****Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan**

1. Reversible Difference Expansion Embedding Using Two Edge Directions
Wen-Chuan Wu, Wei-Teng Wong, Zi-Wei Lin
 2. Diffracted Fields by the Edge of Wedge and Reflected Fields from Surface of Wedge
Saki Kameyama, Jiro Iwashige, Motohiko Iwaida, Yuki Isayama
 3. A Method for Finding Diffraction Points on Two Edges with Arbitrary Angle and Its Diffracted Fields
Motohiko Iwaida, Jiro Iwashige, Saki Kameyama, Ryo Nagao
 4. Estimation of Path Loss in Urban Areas Based on 1-Ray Model Using Building Coverage and Floor Area Ratios
Keisuke Shigetomi, Masafumi Takematsu, Kazunori Uchida, Junichi Honda
-

CISIS-S10: Web and Internet Computing**Chair: Kin Fun Li, University of Victoria, Canada**

1. Predicting Student Academic Performance
Kin Fun Li, David Rusk, Fred Song
2. Current Trends in Emotional e-Learning: New Perspectives for Enhancing Emotional Intelligence
Thanasis Daradoumis, Marta Arquedas, Fatos Xhafa
3. Digital Collaboration Network for SMEs: Awareness of ICT and Perceived Outcome
Olivia Fachrunnisa, Mutamimah, Gunawan

W-ALICE-S2: Emotion Awareness and Personalized e-Learning**Chair: Santi Caballe, Open University of Catalonia, Spain**

1. Opinion Mining on Educational Resources at the Open University of Catalonia
Isabel Guitart, Jordi Conesa, Luis Villarejo, Agata Lapedriza, David Masip, Antoni Perez, Elena Planas
2. Measuring the Impact of Emotion Awareness on e-learning Situations
Michalis Feidakis, Thanasis Daradoumis, Santi Caballe, Jordi Conesa
3. A Case Study on the Influence of Emotions on Students' and Instructors' Marks
Ruth Cobos, Pilar Rodriguez, Alvaro Ortigosa
4. Measuring Empathy to Support Learning Design and Narrative Game: A Phenomenological Approach
Giuseppina Rita Mangione, Tiziana Discepolo, Pio Alfredo Di_Tore, Stefano Di_Tore, Carla Cozzarelli, Felice Corona
5. A Network Analysis Method for Selecting Personalized Content in e-Learning Programs
Luis Casillas, Thanasis Daradoumis, Santi Caballe

W-SEIMTH-S3: Multi-disciplined Issues Related to Rural Tourism and Tourism Education**Chair: Chien-Chao Chen, Asia University, Taiwan**

1. The Relationship Between Nature Experiential Activities and Multiple Intelligences Development with Autism Children
Chiou-Shya Torng
2. Constructing the Supporting Service, Education Guidance, Management System of Network Education and Examination
Xiaoyan Liu, Yu Mei
3. A Sport Capital Model to Explain Life Quality in Taiwan's Rural Communities
Li-Shiue Gau
4. The Effect of Experiential Agriculture Activities on the Tourism Image of Foreign Tourists to Dai-Dai Recreational Agriculture Area in Taiwan
Chiou-Shya Torng, Jiun-Jie Jang

W-VENOA-S3: Innovative Applications II**Chair: Hiroaki Nishino, Oita University, Japan**

1. An Integrated Distributed Log Management System with Metadata for Network Operation
Minoru Ikebe, Kazuyuki Yoshida
2. A Study on Pseudo-Haptics by Cursor Moving with Motion Blur
Masahiro Fukushima, Tsuyoshi Takemoto, Makoto Fujimura
3. A Method of LFSR Seed Generation for Scan-based BIST Using Constrained ATPG
Takanori Moriyasu, Satoshi Ohtake
4. Study and Practice on Information Technology in an Educational Field Using a Cloud Service and SNS
Ritsuko Watanabe, Hiroyuki Ehara, Eiji Aoki
5. A Sonification Method for Medical Images to Support Diagnostic Imaging
Tsuneo Kagawa, Shuichi Tanoue, Hiro Kiyosue, Hiromu Mori, Hiroaki Nishino

19:00-21:00 Banquet Party

Friday, July 5, 2013

08:00 Registration

09:00-10:00 Single Session: Keynote IV

Chair: Jing-Pha (Jeff) Tsai, President of Asia University, Taiwan

Prof. Stephen S. Yau, Arizona State University, USA

Situation Awareness in Applications of Services and Cloud Computing

10:00-10:30 Coffee Break

10:30-12:00 Parallel Sessions

CISIS-S11: Data Storage and Scheduling

Chair: Fatos Xhafa, Technical University of Catalonia, Spain

1. Towards an Efficacious Storage Performance in Virtualised Environment
Ahmed A. Faris, Mohamed A. Shrud, Ahmad H. Kharaz
2. Split File Model for Big Data in Low Throughput Storage, Minoru Uehara
3. Grammar-Based Matching of Multiple Continuous Queries on XML Streams
Chien-Ping Chou, Kuen-Fang Jea
4. Using STK Toolkit for Evaluating a GA Base Algorithm for Ground Station Scheduling
Fatos Xhafa, Xavier Herrero, Admir Barolli, Makoto Takizawa

CISIS-S12: Mobile and Wireless Networks

Chair: Akio Koyama, Yamagata University, Japan

1. Group-Based Control Method for Machine Type Communications in LTE System
Feng-Ming Yang, Chun-Yen Hsu, Wen-Chien Hung
2. A Fast SA Update Mechanism for Secure SIP/IMS Mobility in Integrated UMTS-WLAN Networks
Shih-Yuan Cheng, Whai-En Chen
3. A Oneself Adjusts Backoff Mechanism for Channel Access in IEEE 802.11 DCF WLAN
Ming-Hwa Cheng, Wen-Shyang Hwang, Cheng-Han Lin, Hui-Kai Su
4. A DTN Routing Protocol Based on Mobility and Maximum Number of Replications
Kenta Henmi, Akio Koyama

W-ICAS-S1: Advances in the Design and Application of Context-Aware Systems

Chair: Philip Moore, Birmingham City University, UK

1. Situational Awareness for Enhanced Patient Management
Philip Moore, Andrew Thomas, George Tadros, Leonard Barolli, Hai V. Pham
2. Emotive Sensors for Intelligent Care Systems: A Heuristic Discussion of Autonomic Wireless Sensing Systems
A.M. Thomas, P. Moore, C. Evans, M. Sharma, P. Chima, V.C. Vijay, S. Abu Rmeileh
3. A Multimodal Emotion-Focused e-health Monitoring Support System
Jing Chen, Bin Hu, Na Li, Chengsheng Mao, Philip Moore

W-IIHCI-S1: Intelligent Interfaces**Chair: Mauro Migliardi, University of Padova, Italy**

1. Visualization of character's Intentions in Dramatic Media
Vincenzo Lombardo, Rossana Damiano, Antonio Lieto, Antonio Pizzo
2. Distractive User Interface for Repetitive Motor Tasks: A Pilot Study
Giacinto Barresi, Dario Mazzanti, Darwin Caldwell, Andrea Brogni
3. A Survey of Recent Advancement in Prospective Memory Support Systems
Mauro Migliardi, Alberto Servetti

W-ICLS-S1: Large-Scale Systems**Chair: Giovanni Morana, University of Catania, Italy**

1. Using Modularity Metrics to Assist Move Method Refactoring of Large Systems
Christian Napoli, Giuseppe Pappalardo, Emiliano Tramontana
2. Exploiting GPUs to Simulate Complex Systems
Fabrizio Messina, Giuseppe Pappalardo, Corrado Santoro
3. Controlling Distributed Systems Using Parallel Autonomic Managers
M. Di_Sano, A. Di_Stefano, G. Morana, D. Zito
4. Automated Conformance Testing of Java Virtual Machines
Andrea Calvagna, Emiliano Tramontana

12:00-13:30 Lunch Break**13:30-15:00 Parallel Sessions****CISIS-S13: Secure Systems****Chair: Josep Pegueroles, Technical University of Catalonia, Spain**

1. Self-Authentication Mechanism with Recovery Ability for Digital Images
Yi-Hui Chen, Chih-Yang Lin, Wanutchaporn Sirakriengkrai
2. Security Analysis of a Protocol Based on Multiagents Systems for Clinical Data Exchange
Albert Bruques de la Torre, Magi Lluch-Ariet, Josep Pegueroles-Valles
3. The TAMESIS Project Enabling Technologies for the Health Status Monitoring and Secure Exchange of Clinical Record
Josep Pegueroles, Luis J. de_la_Cruz, Juan Vera-del-Campo, Juan Hernandez-Serrano, Olga Leon

W-HCCIEA-S1: Hybrid/Cloud Computing Infrastructure for e-Science Application**Chair: Olivier Terzo, Istituto Superiore Mario Boella, Italy**

1. Evolution Feature Oriented Model Driven Product Line Engineering Approach for Synergistic and Dynamic Service Evolution in Clouds: Pattern Data Structure,Zhe Wang
2. Data as a Service (DaaS) for Sharing and Processing of Large Data Collections in the Cloud
Olivier Terzo, Pietro Ruiu, Enrico Bucci, Fatos Xhafa
3. e-Clouds: Scientific Computing as a Service
David Mendez, Mario Villamiaz, Harold Castro
4. GNSS Based Services on Cloud Environment
L. Mossucca, L. Spogli, G. Caragnano, V. Romano, O. Terzo, G. De_Franceschi, L. Alfonsi, E. Plakidis

W-ICAS-S2: Application of Context-Aware Systems**Chair: Philip Moore, Birmingham City University, UK**

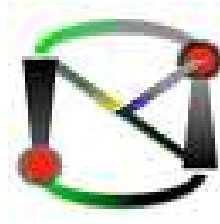
1. Towards an IMAS Model Ontology: An Intelligent Mobile Advertising Service
Cain Evans, Jagdev Bhogal, Salameh Abu Rmeileh
2. The Application of Intelligent Context-Aware Systems to the Detection of Online Student Cheating
Thomas Lancaster
3. Situated Computing and Virtual Learning Environments: e-Learning and the Benefits to the Students Learning
Ron Austin, Mak Sharma, Philip Moore, David Newell

W-IIHCI-S2: Advanced Interaction in Mixed Environments**Chair: Antonio Gentile, University of Palermo, Italy**

1. An Evaluation of HCI and CMC in Information Systems within Highly Crowded Large Events
Stefano Boca, Antonio Gentile, Stefano Ruggieri, Salvatore Sorce
2. Gestures Vs Gesticulations: Change Point Models Based Segmentation for Natural Interactions
Emmanuel Bernier, Ryad Chellali, Indira Mouttapa Thowenin
3. eLaparo4D: A Step Towards a Physical Training Space for Virtual Video laparoscopic Surgery
Marco Gaudina, Victor Zappi, Edoardo Bellanti, Gianni Vercelli

W-IIBM-S1: Intelligent Informatics**Chair: Hui-Huang Hsu, Tamkang University, Taiwan**

1. Network Completion for Time Varying Genetic Networks
Natsu Nakajima, Tatsuya Akutsu
2. Power-Saving Encoding Schemes for Wireless ECG Signal Transmissions
Hsiao-Chiu Chu
3. Discovering Feedback and Coupled Feedback Loops in KEGG Pathways through cross-map Identification
Chen-Lung Liu, Chien-Ming Chen, Hui-Huang Hsu, Tun-Wen Pai
4. Mining Polymorphic SSRs from Individual Genome Sequences
Yu-Lun Lu, Chien-Ming Chen, Tun-Wen Pai, Hao-Teng Chang
5. In Vitro Characterization and in Vivo Application of a Dual Functional Peptide
Chien-Jung Chen, Ping-Hsueh Kuo, Ta-Jen Hung, Shun-Lung Fang, Che-Chuan Yang, Shieh-Yueh Yang, Margaret Dah-Tsyr Chang



IMIS-2013 Main Conference and Workshops Program

Wednesday, July 3, 2013

08:00 Registration

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

Keynote I

Chair: Fang-Yie Leu, Tunghai University, Taiwan

Prof. Felix Wu: Ubiquitous Computing Leveraging Online Social Informatics

10:30-11:00 Coffee Break

11:00-12:00 Single Session: Keynote II

Keynote II

Chair: Hsing-Chung Chen, Asia University, Taiwan

Prof. S.S. Iyengar: Next Generation Sensor Networks: Sensor Data Collection Current Art and Future Perspective

12:00-13:30 Lunch Break

13:30-15:00 Parallel Sessions

IMIS-S1: 4G Networks and Mobility Management**Chair: Ilsun You, Korean Bible University, Republic of Korea**

1. A Local IP Access Mechanism for VoIP Service in LTE Home eNodeB Systems
Chia-Hsuan Chang, Hsi-Lu Chao, Chia-Lung Liu, Kuei-Li Huang, Yi-Bing Lin
2. Reward-Based Radio Interface Selection for Hybrid 4G UMTS and LTE Communications
Ben-Jye Chang, Ying-Hsin Liang, Kai-Xiang Cao
3. Analysis of SIP-Based Location Updates in Distributed Mobility Management Schemes
Hassan Ali-Ahmad, Kashif Munir, Xavier Lagrange, Meryem Ouzzif, Philippe Bertin
4. A Seamless Multi-link Switch Solution for LTE and Wi-Fi Integrated Networks
Chai-Hien Gan, Yung-Chun Lin, Shun-Neng Yang, Yi-Bing Lin

IMIS-S2: Mobile Network Algorithms and Applications**Chair: Hae-Duck Joshua Jeong, Korean Bible University, Korea**

1. Localized Paging Scheme in PMIPv6
Zhiwei Yan, Jong-Hyouk Lee, Ye Tian
2. On Pointer Forwarding Based Mobility Management for Cost-Optimized Proxy Mobile IPv6 Networks
Seung Yoon Park, Jongpil Jeong
3. Proactive Caching for Enhancing User-Side Mobility Support in Named Data Networking
Ying Rao, Huachun Zhou, Deyun Gao, Hongbin Luo, Ying Liu
4. Creating Pervasive, Dynamic, Scalable Android Applications
Shih-Hao Hung, Yong-Wei Chen, Jeng-Peng Shieh

W-esIoT-S1: Performing the Internet of Things**Chair: Gianluca Rizzo, HES-SO University, Switzerland**

1. Evaluating Video Streaming in Network Architectures for the Internet of Things
Pedro Martinez-Julia, Elena Torroglosa Garcia, Jordi Ortiz Murillo, Antonio F. Skarmeta
2. On the Characterization of Collaborative Mobile Services for the Internet of Things
Edwin Cedenro Herrera, Tomas Robles, Ramon Alcarria, Augusto Morales Dominguez
3. Evaluation Framework for IEEE 802.15.4 and IEEE 802.11 for Smart Cities
Pedro Fernandez, Antonio J. Jara, Antonio F.G. Skarmeta
4. A Framework for Non Intrusive Load Monitoring Using Bayesian Inference
Krishnan Srinivasarengan, Y.G. Goutam, M. Girish Chandra, Swanand Kadhe

W-MCNCS-S1: Security and Data Management**Chair: Fang-Yie Leu, Tunghai University, Taiwan**

1. A True Random-Number Encryption Method
Yi-Li Huang, Fang-Yie Leu, Jian-Hong Chen, Cheng-Chung Chu, Chao-Tung Yang
2. Using a Stored-Value Card to Provide an Added-Value Service of Payment Protocol in VANET
Chin-Ling Chen, Wei-Chen Tsai
3. On Secure Data Management in Health-Care Environment
Arcangelo Castiglione, Ciriaco D'Ambrosio, Alfredo De Santis, Aniello Castiglione, Francesco Palmieri
4. Text Compression and Encryption through Smart Devices for Mobile Communication
Raffaele Pizzolante, Bruno Carpentieri, Aniello Castiglione, Arcangelo Castiglione, Francesco Palmieri
5. TSR: Topology Reduction from Tree to Star Data Grids
Ming-Chang Lee, Fang-Yie Leu, Ying-Ping Chen

W-SMEUCE-S1: Sustainability Management of E-Business and Information Management I**Chair: Mei-Hua Liao, Asia University, Taiwan**

1. Tradition and Innovation in Japanese Long-Established Companies: Focus on E-Business
Hidekazu Sone
2. The Ex-ante and Ex-post Information of an Asset Return
Saburo Horimoto, Mohammad Ali Tareq
3. SEO and Insider Trading
Mei-Hua Liao, Li-Wen Chen
4. Investor Sentiment and Acute Coronary Syndrome
Mei-Hua Liao, Chia-Hung Kao, Chih-Hsin Muo
5. A Study on FDI Technological Spillover Effect in Central China
Kewei Bi

15:00-15:30 Coffee Break**15:30-17:00 Parallel Sessions****IMIS-S3: Wireless and Mobile Networks for UPC****Chair: Ilsun You, Korean Bible University, Republic of Korea**

1. Opportunistic Spectrum Sharing Based Resource Allocation for Wireless Virtualization
Mao Yang, Yong Li, Depeng Jin, Jian Yuan, Li Su, Lieguang Zeng
2. A Novel Approach to Joint Source-Channel Coding for Scalable Video Transmission
Yuxing Wu, Xingjun Zhang, Song Cen, Xiaoshe Dong, Ilsun You
3. The Stochastic Properties of Cognitive Networks Under RD Mobility Model
Jianfeng Guan, Wei Quan, Changqiao Xu, Hongke Zhang
4. Detect Rare Events via MICE Algorithm with Optimal Threshold
Sung-Chiang Lin, Charlotte Wang, Zhen-Yu Wu, Yu-Fang Chung

IMIS-S4: Internet Computing and Disaster Management**Chair: Hae-Duck Joshua Jeong, Korean Bible University, Korea**

1. Inter-cluster Topology Control: An Evolutionary Game Perspective
Xin Zhao, Chunxiao Jiang, Yue Wang, Jian Yuan, Ilsun You
2. Connection Characteristics Analyses Based on Access Network Data
Fei Song, Yige Zhang, Zhaoxu An, Huachun Zhou, Hongke Zhang
3. Implementation and Evaluation of Resilient Network Based on Cognitive Wireless Network Framework
Goshi Sato, Noriki Uchida, Yoshitaka Shibata
4. An Evolutionary Computational Approach for Optimizing Broadcasting in Disaster Response Scenarios
D.G. Reina, S.L. Toral, J.M. Leon-Coca, F. Barrero, N. Bessis, E. Asimakopoulou

W-esIoT-S2: IPv6 and Smart Cities**Chair: Antonio J. Jara, University of Murcia, Spain**

1. A Network Mobility Solution Based on 6LoWPAN Hospital Wireless Sensor Network (NEMO-HWSN)
Mohammadreza Sahebi Shahamabadi, Borhanuddin Bin Mohd Ali, Pooria Varahram, Antonio J. Jara
2. A Global Perspective of Smart Cities: A Survey
Soledad Pellicer, Guadalupe Santa, Andres L. Bleda, Rafael Maestre, Antonio J. Jara, Antonio Gomez Skarmeta
3. Civitas: The Smart City Middleware, from Sensors to Big Data
Felix J. Villanueva, Maria J. Santofimia, David Villa, Jesus Barba, Juan Carlos Lopez

W-MCNCS-S2: Health and Medical Care**Chair: Aniello Castiglione, Universita degli Studi di Salerno, Italy**

1. Medical Care Quality and Operating Performance of Taiwan's Psychiatric Hospitals-BNV-DEA and CND-DEA Applications
Jwu Rong Lin, Tso-Kwei Peng, Ching-Yu Chen, Li-Wei Wu, Ming Hsien Lu
2. Enhancing Lipolysis-Stimulating Activity of Potato Protein Hydrolysate Using Limited Enzymatic Hydrolysis and Ultrafiltration
Wen-Dee Chiang, Min-Chung Hong, Wan-Teng Lin
3. Did the Older Adults' Physical Health Affect Their Behaviors of Eating Food Away from Home in Taiwan
Kuei-I Lee, Wen-Dee Chiang, Wan-Teng Lin
4. Performance Evaluation on Simplified Computer for the Elderly People
Jei-Chen Hsieh, Chang-Chan Huang

W-SMEUCE-S2: Sustainability Management of E-Business and Information Management II**Chair: Ching-Hui Shih, Asia University, Taiwan**

1. House Pricing and Corporate Social Responsibility
Mei-Hua Liao, Ya-Yun Chang
2. Institutional Stock Trading and Loan Renegotiation Information
Mei-Hua Liao, Yong-Chin Liu, Li-Ning Lai
3. Relationship Quality and Customer Loyalty in Taiwan-A Longitudinal Aspect
Neng-Hui Wu, Bin-Tsann Yang, Ching-Hui Shih, Pei-Ching Lee
4. Currency Mismatch, Foreign Reserves and RMB Exchange Rate Evidence on 1986-2010 Data in China
Wang Yongmao

17:10-18:40 Single Session: Panel Discussion**Panel Discussion****19:00-21:00 Welcome Reception Party**

Thursday, July 4, 2013**08:00 Registration****09:00-10:00 Single Session: Keynote III****Keynote III****Chair: Fatos Xhafa, Technical University of Catalonia****Dr. Santi Caballe:** Intelligent software systems in support for enhancing and improving the on-line collaborative learning experience**10:00-10:30 Coffee Break****10:30-12:00 Parallel Sessions****IMIS-S5: Algorithms and Systems for UPC****Chair: Zhuzhong Qian, Nanjing University, China**

1. Tree-Based Genetic Algorithm with Binary Encoding for QoS Routing
Vincenzo Maniscalco, Silvana Greco Polito, Antonio Intagliata
2. GPS-Free Host Approaching in Mobile Ad-Hoc Networks
Kazuyuki Ishii, Naoshi Sato
3. RDAI: Router-Based Data Aggregates Identification Mechanism for Named Data Networking
Kai Wang, Huachun Zhou, Jia Chen, Yajuan Qin
4. Verification of Hybrid Chi Model for Cyber-physical Systems Using PHAVer
Cong Xinyu, Yu Huiqun, Xu Xin

IMIS-S6: Secure Systems**Chair: Ilsun You, Korean Bible University, Republic of Korea**

1. A Static Birthmark for MS Windows Applications Using Import Address Table
JongCheon Choi, YongMan Han, Seong-je Cho, HaeYoung Yoo, Jinwoon Woo, Minkyu Park, Youngsang Song, Lawrence Chung
2. Two-Step P2P Traffic Classification with Connection Heuristics
Wujian Ye, Kyungsan Cho
3. Detection of Mobile Botnet Using VPN
Byungha Choi, Sung-Kyo Choi, Kyungsan Cho
4. A GEMD Data Hiding by Pixel Segmentation Strategy
Wen-Chung Kuo, Sheng-Yi Chang

W-esIoT-S3: Cloud of Things and Web of Things**Chair: Gianluca Rizzo (HES-SO University, Switzerland)**

1. Highly Personalized Health Services Using Cloud and Sensors
Diego Gachet Paez, Fernando Aparicio, Manuel De_Buenaga, Margarita Rubio
2. Using Collaborative Virtual Objects Based on Services to Communicate Smart Objects
Giovanny Mauricio Tarazona Bermudez, Jordan Pascual Espada, Edward Rolando Nunez-Valdez
3. Infrastructure Setup and Deployment in Sensing Cloud Environments
S. Distefano, G. Merlino, A. Puliafito

W-ITAUC-S1: Innovative Intelligent Algorithms and Network Security**Chair: Neng-Yih Shih, Asia University, Taiwan**

1. Multi-generating Procedure and Second Grey Relational Analysis
Neng-Yih Shih, Hsing-Chung Chen
2. On Target Coverage Problem of Angle Rotatable Directional Sensor Networks
Mao-Cheng Wu, Wei-Fu Lu
3. Secure Multicast Key Protocol for E-Mail System Using Factorial Number Structure
Hsing-Chung Chen, Chao-Ching Lee, Chuan-Hsien Mao, Chun-Cheng Pan

W-SMEUCE-S3: Ubiquitous Commerce Engineering and Operation Management**Chair: Kuei-Yuan Wang, Asia University, Taiwan**

1. The Changing Pattern of Value Creating Activities: Evidence from Taiwanese Manufacturing Firms in China
Ying-Li Lin, Ching-Wen Tung
2. Macroeconomic Condition and Capital Structure Adjustment Speed - Evidence from the Indonesian Stock Market
Shyh-Weir Tzang, Kuei-Yuan Wnag, Relia Novita Rahim
3. The Impacts of Business Relational Characteristics on the Performance of Innovation Diffusion
Mei Hua Huang, Perng-Fei Huang, Chao-Jung Wu
4. The Effect of User Generated Video Reviews on Consumer Purchase Intention
Ya-Wen Yu, Yuchia Natalia
5. Identifying Sub-community of Finance Research
Shao-Chun Chiu

W-AHUC-S1: Ad Hoc and Sensor Networks**Chair: Hung-Chin Jang, National Chengchi University, Taiwan**

1. Social Aware Assisted Transmission in MANET
Hung-Chin Jang, Pei-Hsuan Lee
2. Cycle-Based Data Aggregation for Grid-Based Wireless Sensor Networks
Yung-Kuei Chiang, Neng-Chung Wang, Chih-Hung Hsieh
3. Ant-Based On-Demand Clustering Routing Protocol for Mobile Ad-Hoc Networks
Kuen-Han Li, Jenq-Shiou Leu, Jiri Hoek
4. A Prediction Scheme for Object Tracking in Grid Wireless Sensor Networks
Young-Long Chen, Yu-Cheng Lin, Tzu-Chieh Sun

12:00-13:30 Lunch Break**13:30-15:00 Parallel Sessions****IMIS-S7: Security and Dependable Applications****Chair: Aniello Castiglione, Universita degli Studi di Salerno, Italy**

1. Matrix-Based Pairwise Key Establishment with Pre and Post Deployment Knowledge for Wireless Mesh Networks
Yuxin Zhang, Li Xu, Xinyi Huang, Jie Li
2. Certificate-Based Proxy Re-encryption for Public Cloud Storage
Chul Sur, Youngho Park, Sang Uk Shin, Kyung Hyune Rhee, Changho Seo
3. Instruction Fault Attack on the Miller Algorithm in a Pairing-Based Cryptosystem
Kiseok Bae, Sangjae Moon, Jaecheol Ha
4. A Secure RFID Authentication Scheme for Medicine Applications
Zhen-Yu Wu, Tzer-Long Chen, Sung-Chiang Lin, Charlotte Wang

IMIS-S8: Trust and Privacy**Chair: Francesco Palmieri, Second University of Naples, Italy**

1. Biometrics-Based Data Link Layer Anonymous Authentication in VANETs
Lin Yao, Chi Lin, Jing Deng, Fangyu Deng,
2. *Jingwei Miao, Kangbin Yim, Guowei Wu*
3. Privacy Preserving Secure Communication Protocol for Vehicular Ad Hoc Networks
Mohammad Mikki, Yousif M. Mansour, Kangbin Yim
4. An Improved Direct Trust Evaluation Algorithm for the Context-Aware Trust Model
Yao Ma, Hongwei Lu, Zaobin Gan

W-esIoT-S4: Identification Solutions and Security**Chair: Juan Lopez de Armentia, University of Deusto, Spain**

1. Using Non-uniform Probability Distribution p^* to Improve Identification Performance in Dense RFID Reader Environments
M^a Victoria Bueno Delgado, Pablo Pavon Marino
2. Network Admission Control Solution for 6LoWPAN Networks
Luis M.L. Oliveira, Joel J.P.C. Rodrigues, Carlos Neto, Amaro F. de_Sousa
3. A Service-Oriented Auto Managed System for Transportation Applications
Jose I. San-Jose, R. Zangroniz, Juan J. de_Dios, Jose M. Pastor
4. Future Supermarket: Overcoming Food Awareness Challenges
Sergio Gonzalez-Miranda, Ramon Alcarria, Tomas Robles, Augusto Morales, Ignacio Gonzalez, Eloi Montcada

W-ITAUC-S2: Intelligent Techniques for Sensor Networks and Radio Networks**Chair: Young-Long Chen, National Taichung University of Science and Technology, Taiwan**

1. A Hybrid Local Virtual Force Algorithm for Sensing Deployment in Wireless Sensor Network
Cheng-Chih Yang, Jyh-Horng Wen

2. A Low-Energy Adaptive Clustering Hierarchy Architecture with an Intersection-Based Coverage Algorithm in Wireless Sensor Networks
Young-Long Chen, Fu-Kai Cheung, Yung-Chi Chang
3. Analysis of Cognitive Radio Networks with Imperfect Sensing and Backup Channels
Jyu-Wei Wang, Ramzi Adriman
4. Using Innovative Differential Evolution Algorithm for OFDM Reducing PAPR
Shu-Hong Lee, Ho-Lung Hung

W-SMEUCE-S4: Ubiquitous Social Enterprise Governance of Information Management

Chair: Ying-Li Lin, Asia University, Taiwan

1. Research on Innovation of the Structure of Social Enterprise Governance - A Case Study on CAN YOU Group
Dingrong Liu
2. The Obstacles of Constructing a Learning Government and Resolution
Dai Changqiao
3. Benefits Sharing of University-Enterprise Innovation Platform
Liu Ding-Rong, Wang Bingfeng
4. The Thoughts on Tax Policy for Promoting the Development of SMEs
Deng Manyuan

W-AHUC-S2: Ubiquitous Computing

Chair: Tzung-Shi Chen, National University of Tainan, Taiwan

1. Friend Recommendation for Location-Based Mobile Social Networks
Cheng-Hao Chu, Wan-Chuen Wu, Cheng-Chi Wang, Tzung-Shi Chen, Jen-Jee Chen
2. A Modified Inhomogeneity Measure in Spatial Distribution
Cheng Li, Zhangdui Zhong, Hao Wu, Lei Xiong
3. Congestion Control of Wireless Video Using Dispersive Piecewise Mapping
Wen-Ping Lai, Wei-Hao Fu
4. On Performance Evaluation of Various Traffic Combination Based on Network Calculus
Yangyang Gao, Fei Song, Yajuan Qin, Ilsun You

15:00-15:30 Coffee Break

15:30-17:00 Parallel Sessions

IMIS-S9: Intelligent Technologies and Applications

Chair: Myungwon Hwang, KISTI, Korea

1. Collecting Korean-English Pairs for Translation of Technical Terms
Myungwon Hwang, Taehong Kim, Jinhee Lee, Donald J. Kim, Do-Heon Jeong, Sa-Kwang Song, Hanmin Jung
2. 3-Axis Camera Motion Compensation Coupled with Target Tracking for Stabilized Video Capture from Small-Scale Flying Vehicle
Sun Yanjie, Dongwoon Jeon, Doo-Hyun Kim
3. Hough Transform with Kalman Filter on GPU for Real-Time Line Tracking
Tayn Vladimir, Dongwoon Jeon, Doo-Hyun Kim
4. A Method for Recommending the Most Appropriate Expansion of Acronyms Using Wikipedia
Dongjin Choi, Juhyun Shin, Eunji Lee, Pankoo Kim

IMIS-S10: Ontology Applications**Chair: Hae-Duck Joshua Jeong, Korean Bible University, Korea**

1. Tag-Based Integrated Semantic Ontology Construction and Evolution
Hyun Jung Lee, Mye Sohn
2. Visualization of Resource Description Framework Ontology Using Hadoop
Seoung-Hun Park, Young-Guk Ha
3. Transitivity Reasoning for RDF Ontology with Iterative MapReduce
Bumsuk Jang, Young-Guk Ha

W-esIoT-S5: Methods and Platforms for IoT**Chair: Ian S. Thomas, Fujitsu, Japan**

1. Saving Energy through Collaborative Eco-aware Everyday Things
Juan Lopez-de-Armentia, Diego Casado-Mansilla, Diego Lopez-de-Ipina
2. A Systematic Approach for Service Prosumerization in IoT Scenarios
Diego Martin, Ramon Alcarria, Tomas Robles, Augusto Morales
3. Implementation of an Experimental Platform for the Social Internet of Things
Roberto Girau, Michele Nitti, Luigi Atzori
4. An Asynchronous Message Delivery Service for iGaDs (Intelligent Guards Against Disasters)
Y.Z. Ou, C.M. Huang, C.T. Hu, J.W.S. Liu, E.T.H. Chu, C.S. Shih

W-ITAUC-S3: Intelligent Techniques and Its Applications**Chair: Yung-Fa Huang, Chaoyang University of Technology, Taiwan**

1. Breast Tumor Segmentation Based on Level-Set Method in 3D Sonography
Yu-Chih Lin, Yu-Len Huang, Dar-Ren Chen
2. Context-Aware for Smartphone Sensing in Over-the-Counter Market: Ambient Intelligence in Mobile Stock Markets
Mu-Yen Chen
3. Denoise of ECG Based on Weighted Sum of Intrinsic Mode Functions
Ching-Haur Chang, Shin-Da Lee
4. A Novel Algorithm Based on Improved BP Neural Network and Its Application in Color Management
Du Yanzhe

W-WAIS-S1: Security and Privacy**Chair: Hiroaki Kikuchi, Tokai university, Japan**

1. Toward Automated Reduction of Human Errors Based on Cognitive Analysis
Daisuke Miyamoto, Takeshi Takahashi
2. Improving the Confidential Data Totalization
Kazuyoshi Furukawa, Masahiko Takenaka, Tetsuya Izu
3. Privacy-Preserving Protocol for Epidemiology in Effect of Radiation
Hiroaki Kikuchi, Tomoki Sato, Jun Sakuma
4. New Constructions of (2,n)-Threshold Secret Sharing Schemes Using Exclusive-OR Operations
Yuji Suga
5. Efficient Computing over $GF(2^{16})$ Using Graphics Processing Unit
Satoshi Tanaka, Takanori Yasuda, Bo-Yin Yang, Chen-Mou Cheng, Kouichi Sakurai

W-AHUC-S3: Vehicular and Delay Tolerant Networks**Chair: Chih-Yung Chang, Tamkang University, Taiwan**

1. A Multicast Scheduling Approach for Layered Video Service in Vehicular Ad Hoc Networks
Miao Hu, Zhangdui Zhong, Chih-Yung Chang
2. Multi-hop Connected Probability Based on Dependence among Consecutive Links in VANETs
Muchen Wu, Zhangdui Zhong, Hao Wu, Minming Ni
3. An Efficient Transmission Protocol Based on Network Coding in Delay Tolerant Networks
Jang Ping Sheu, Chih-Yin Lee, Chuang Ma
4. An Adaptive Strategy for Location-Aided Routing Protocol in Vehicular Ad Hoc Networks
Jia Meng, Hao Wu, Hengliang Tang, Xingyu Qian

19:00-21:00 Banquet Party

Friday, July 5, 2013

08:00 Registration

09:00-10:00 Single Session: Keynote IV

Chair: Jing-Pha (Jeff) Tsai, President of Asia University, Taiwan

Prof. Stephen S. Yau, Arizona State University, USA

Situation Awareness in Applications of Services and Cloud Computing

10:00-10:30 Coffee Break

10:30-12:00 Parallel Sessions

IMIS-S11: Pervasive Systems and Intelligent Environments

Chair: Marek R. Ogiela, AGH University of Sci. and Tech., Poland

1. Self-Evolved Ontology-Based Service Personalization Framework for Disabled Users in Smart Home Environment
Mye Sohn, Sunghwan Jeong, Hyun Jung Lee
2. Cognitive Information Systems in Ubiquitous Computing
Marek R. Ogiela, Lidia Ogiela
3. The LDA-Based Face Recognition at a Distance Using Multiple Distance Image
Hae-Min Moon, Sung Bum Pan
4. Improved Active Shape Model for Efficient Extraction of Facial Feature Points on Mobile Devices
Yong-Hwan Lee, Dong-Seok Yang, Jong-Kook Lim, Yukyong Lee, Bonam Kim

IMIS-S12: Cloud Computing

Chair: Chao-Tung Yang, Tunghai University, Taiwan

1. Performance and Power Estimation for Mobile-Cloud Applications on Virtualized Platforms
Shih-Hao Hung, Fu-Tien Liang, Chia-Heng Tu, Norman Chang
2. A QoS-Constrained Resource Allocation Game in Federated Cloud
Xin Xu, Huiqun Yu, Xinyu Cong
3. QoS-Aware I/O Schedule for Virtual Machines in Cloud Computing Environment
Xiaodong Liu, Weiqin Tong, Chao Shen
4. Implementation of a Virtual Switch Monitor System Using OpenFlow on Cloud
Chao-Tung Yang, Wei-Sheng Chen, Yi-Wei Su, Yao-Yu Yang, Jung-Chun Liu, Fang-Yi Leu, William C.C. Chu

W-esIoT-S6: Internet of Things Applications

Chair: Maria Rita, University of Luxembourg, Luxembourg

1. Environmental Effect Removal Based Structural Health Monitoring in the Internet of Things
Hongyang Zhang, Junqi Guo, Xiaobo Xie, Rongfang Bie, Yunchuan Sun
2. Evolution Towards Better AAL Environments
Andres L. Bleda, Rafael Maestre, Guadalupe Santa, Soledad Pellicer, Antonio J. Jara, Antonio Gomez Skarmeta

3. The Research on Construction of Assessment Instruments for Postgraduates Based on Competency Model
Zheng Ying, Wang Xuejun, Li Xiaojian, Xi Caiyun
4. A Radio Mesh Platform for the IOT
Sylvain Vittecoq

W-ACTICS-S1: Wireless and Mobile Networks**Chair: Bhed Bahadur Bista, Iwate Prefectural University, Japan**

1. Multi-agent Support for Multiple Concurrent Applications and Dynamic Data-Gathering in Wireless Sensor Networks
Mo Haghghi, Dave Cliff
2. Network Link Selection Method for Disaster Oriented Mobile Network Based on OpenFlow Framework
Goshi Sato, Koji Hashimoto, Noriki Uchida, Yoshitaka Shibata
3. Wireless Networked Omni-directional Video Distribution System Based on Delay Tolerant Network on Disaster Environment
Kenta Ito, Kazuka Tsuda, Noriki Uchida, Yoshitaka Shibata
4. A Green Time-Bounded Routing Protocol in Solar-Based Vehicular Networks
Yuh-Shyan Chen, Yun-Wei Lin, Chih-Hao Wang

W-PISPIS-S1: Vulnerability Assessment on Public Internet Services**Chair: Kangbin Yim, Soonchunhyang University, Republic of Korea**

1. Security Assessment on User Authentication by an HttpSendRequest Hooking in an HTTP Client
Kyungroul Lee, Hyungjun Yeuk, Sungkwan Kim, Kangbin Yim
2. Security Issues on the CNG Cryptography Library (Cryptography API: Next Generation)
Kyungroul Lee, Youngjun Lee, Junyoung Park, Kangbin Yim, Ilsun You
3. Analysis on Smart Warning System for Home Network in Smart Grid
Hoon Ko

12:00-13:30 Lunch Break**13:30-15:00 Parallel Sessions****IMIS-S13: Distributed Systems****Chair: Feilong Tang, Shanghai Jiao Tong University, China**

1. BGG: A Graph Grammar Approach for Software Architecture Verification and Reconfiguration
Chen Li, Linpeng Huang, Luxi Chen, Chengyuan Yu
2. Towards Energy Efficient Data Centers: A DVFS-Based Request Scheduling Perspective
Weicheng Huai, Zhuzhong Qian, Xin Li, Sanglu Lu
3. Dynamic Web Service Composition Based on Service Integration and HTN Planning
Xinhuai Tang, Feilong Tang, Liu Bing, Delai Chen
4. An Energy Efficient Virtual Machine Placement Algorithm with Balanced Resource Utilization
Wei Huang, Xin Li, Zhuzhong Qian

W-FINGNet-S1: Security Issues and New Applications**Chair: Hae-Duck Joshua Jeong, Korean Bible University, Korea**

1. Key Establishment and Management for Secure Cellular Machine-to-Machine Communication
Inshil Doh, Jiyoung Lim, Shi Li, Kijoon Chae
2. A Dual-Antenna and Mobile Relay Station Based Handover in Distributed Antenna System for High-Speed Railway
Xingyu Qian, Hao Wu, Jia Meng
3. Study on Big Data Center Traffic Management Based on the Separation of Large-Scale Data Stream
Hyoung Woo Park, Il Yeon Yeo, Jongsuk Ruth Lee, Haengjin Jang
4. A Remote Computer Control System Using Speech Recognition Technologies of Mobile Devices
Hae-Duck J. Jeong, Sang-Kug Ye, Jiyoung Lim, Ilsun You, Wooseok Hyun, Hee- Kyoung Song

W-esIoT-S7: Industrial Track**Chair: Antonio J. Jara, University of Murcia, Spain**

1. Composite Business Ecosystems for the Web of Everything: Using Cloud Platforms for Web Convergence
Ian Thomas, Sebastien Gaide, Matthieu Hug
2. IETF 6TSCH: Combining IPv6 Connectivity with Industrial Performance
Pascal Thubert, Thomas Watteyne, Maria Rita Palattella, Xavier Vilajosana, Qin Wang
3. Technical Overview of SmartMesh IP
Thomas Watteyne, Lance Doherty, Jonathan Simon, Kris Pister
4. Smart Cities as an Application of Internet of Things: Experiences and Lessons Learnt in Barcelona
Tomas Gea, Josep Paradells, Mariano Lamarca, David Roldan

W-FIMIS-S1: Innovative Internet Service and Technologies**Chair: Ilsun You, Korean Bible University, Republic of Korea**

1. A Framework for IoT Objects Management Based on Future Internet IoT-IMS Communication Platform
Kai-Di Chang, Chia-Yu Chang, Huei-Min Liao, Jiann-Liang Chen, Han-Chieh Chao
2. TSS: A Primary User Mobility Model in Cognitive Internet
Neng Zhang, Jianfeng Guan, Changqiao Xu, Hongke Zhang
3. An Emotion-Object-Interaction Framework for Exploration of Design Patterns of Massive Interpersonal Persuasion
Toshihiko Yamakami
4. NexTrend: Context-Aware Music-Relay Corridors Using NFC Tags
Samuel Idowu, Desta Haileselassie Hagos, Welderufael Berhane Tesfay, Abiola Famurewa, Juwel Rana, Kare Synnes
5. The Stochastic Properties of Cognitive Networks under RD Mobility Model
Jianfeng Guan, Wei Quan, Changqiao Xu, Hongke Zhang

W-PISPIS-S2: Perspective Security Techniques for Public Internet Services**Chair: Kangbin Yim, Soonchunhyang University, Republic of Korea**

1. Anonymity Scheme with Unlinkability Property in Wireless Mesh Networks
Tianhan Gao, Nan Guo, Kangbin Yim, Qingshan Li
2. A Survey of Feature Extraction Techniques to Detect the Theft of Windows Applications
JongCheon Choi, YongMan Han, Seong-je Cho, HaeYoung Yoo, Minkyu Park, Sangchul Han, Ilsun You, Inshik Song

3. Analysis of Clustering Technique in Android Malware Detection

Aiman A. Abu Samra, Osama A. Ghanem

4. A Static Birthmark of Windows Binary Executables Based on Strings

Yesol Kim, Jeongoh Moon, Dongjin Kim, Younsik Jeong, Seong-Je Cho, Minkyu Park, Sangchul Han