

PROGRAM GUIDE



*Intelligent Networking
and Collaborative Systems*

IEEE INCoS-2012

The 4th IEEE International Conference on
Intelligent Networking and Collaborative Systems

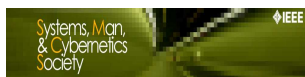
and



EIDWT-2012

The 3rd International Conference on
Emerging Intelligent Data and Web Technologies

Technically Co-Sponsored by:



Sponsored by:



September 19th – 21st, 2012

University Politehnica of Bucharest
Bucharest, Romania

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Welcome Message from 4th IEEE INCoS-2012 Chairs

Welcome to the 4th IEEE International Conference on Intelligent Networking and Collaborative Systems (INCoS-2012), which is held from 19th September to 21st September, 2012 at University Politehnica of Bucharest, Bucharest, Romania. The conference is technically sponsored by IEEE Systems, Man & Cybernetics (IEEE SMC Society).

INCoS is a multidisciplinary conference that covers latest advances in intelligent social networks and collaborative systems, intelligent networking systems, mobile collaborative systems, etc. With the fast development of the Internet, we are experiencing a shift from the traditional sharing of information and applications as the main purpose of the Web to an emergent paradigm, which locates people at the very centre of networks and exploits the value of peoples connections, relations and collaboration. Web 2.0 has come to play a major role in this context by enabling a new generation of social networks and web-based communities and dramatically changing the way we use and interact with the Web. Social network analysis is also a rapidly growing field to investigate the dynamics and structure of intelligent Web-based networking and collaborative systems.

Virtual campuses and organizations strongly leverage intelligent networking and collaborative systems by a great variety of formal and informal electronic relations, such as business-to-business, peer-to-peer and many types of online collaborative learning interactions. This has resulted in entangled systems that need to be managed efficiently and in an autonomous way. In addition, latest and powerful technologies based on Grid and wireless infrastructure as well as Cloud computing are currently enhancing collaborative and networking applications a great deal but also facing new issues and challenges. Well-known social networks lack of knowledge management and adaptive solutions and the information shared among peers is rather static. Virtual communities of practice also provide poorly interactive solutions and lack of full support for organization, management, mobility and security, which have become major research issues in networked collaborative systems. INCoS-2012 conference paid a special attention to security and privacy in networking and collaborative systems, with special focus on Cloud Computing Services and Storage, Organization, Management and Autonomic Computing.

The principal aim of this conference is to stimulate research that will lead to the creation of responsive environments for networking and, at longer-term, the development of adaptive, secure, mobile, and intuitive intelligent systems for collaborative work and learning. INCoS-2012 addresses a large number of themes and focuses on the following research tracks.

- Security, Organization, Management and Autonomic Computing for Intelligent Networking and Collaborative Systems
- Cloud Computing: Service, Storage, Security and Privacy
- Data Mining and Knowledge Management for Intelligent Networking and Collaborative Systems
- Fuzzy Systems and Knowledge Management
- Grid and P2P Distributed Infrastructure for Intelligent Networking and Collaborative Systems
- Intelligent Collaborative Systems for Work and Learning, Virtual Organization and Campuses
- Methodology, Analysis and Sustainability of Intelligent Networking and Collaborative Systems

- Natures Inspired and Multi-Agent Collaborative Systems
- Networking and Collaboration at School
- Next Generation Network Protocols and Components
- Semantics and Ontologies for Networking and Collaborative Systems
- Software Engineering for Intelligent Networking and Collaborative Systems
- Wireless and Sensor Systems for Intelligent Networking and Collaborative Systems
- Poster Track on Intelligent Networking and Collaborative Systems

INCoS-2012 counted on with the support and collaboration of a large and internationally recognized TPC covering all main themes of the conference. After a careful peer review process, in which each paper was reviewed by at least two referees (in average three reviews per submission), there were accepted 69 regular papers from 244 submissions (28% acceptance rate). Additionally, the conference accepted 3 short papers, 36 workshop papers and 7 posters.

The successful organization of the conference is achieved thanks to the great collaboration and hard work of many people and conference supporters. First and foremost, we would like to thank all the authors for their continued support to the conference by submitting their research work to the conference, for their presentations and discussions during the conference days. We would like to thank TPC members and external reviewers for their work by carefully evaluating the submissions and providing constructive feedback to authors. We would like to thank the track chairs for their work on setting up the tracks and the respective TPCs and also for actively promoting the conference and their tracks. We would like to appreciate the work of Workshops Co-Chairs Costin Raiciu (University Politehnica of Bucharest, Romania), Stavros Demetriadis (Aristotle University of Thessaloniki, Greece) and Kin Fun Li (University of Victoria, Canada) for the successful organization of 6 workshops in conjunction with main conference. We would like to acknowledge the excellent work and support by the International Advisory Committee and its chairs Mario Kppen and Masato Tsuru, Kyushu Institute of Technology (KIT), Japan. The support and contribution of the Keynote Speaker, Dr. Liqun Chen, Hewlett-Packard Laboratories, UK, is highly appreciated.

We would like to give special thanks to the members of the local organizing committee. We would like to thank University Politehnica of Bucharest, Bucharest, Romania, for the kind support and help in organizing the conference. We would like to acknowledge the support received by Cisco Systems Inc. and Intel Romania. We are very grateful to IEEE SMC as well as several academic institutions for their technical sponsorship and assistance.

Finally, we hope that you will find these proceedings to be a valuable resource in your professional, research and educational activities! We look forward to seeing you again in forthcoming edition of INCoS conference!

General Co-Chairs

Valentin Cristea, University Politehnica of Bucharest, Romania
Fatos Xhafa, Technical University of Catalonia, Spain
Leonard Barolli, Fukuoka Institute of Technology, Japan

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Florin Pop, University Politehnica of Bucharest, Romania
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Ajith Abraham, MIR Labs, USA

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Fatos Xhafa, Technical University of Catalonia, Spain (Chair)
Leonard Barolli, Fukuoka Institute of Technology, Japan
Valentin Cristea, University Politehnica of Bucharest, Romania

Welcome Message from the 4th IEEE INCoS-2012 Workshops Co-Chairs

Welcome to Workshops of the 4th IEEE International Conference on Intelligent Networking and Collaborative Systems (INCOS-2012), which will be held from 19th September to 21st September, 2012 at University Politehnica of Bucharest, Bucharest, Romania. The conference is technically sponsored by IEEE Systems, Man & Cybernetics (IEEE SMC Society).

Workshops are considered an important part of the conference and offer to authors the possibility to present and discuss latest research finding, ideas and work on progress. In this edition of the conference, there are held six workshops, which complemented the INCOS main themes with specific themes and research issues and challenges, as follows.

1. The International Workshop on Computational Intelligence for Disaster Management (CIDM-2012)
2. The International Workshop on Motion Capture and Classification (MC2-2012)
3. The International Workshop on Cognitive and Cooperative Communications for Wireless Networks (C3WN-2012)
4. The Workshop on Large-Scale Network Security (LSNS-2012)
5. The International Workshop on Secure Internet of Things (SIoT-2012)
6. The International Workshop on Frontiers in Intelligent Networking and Collaborative Systems (FINCoS-2012)

We would like to thank the workshop organizers for their great efforts and hard work in proposing the workshop, selecting the papers, the interesting programs and for the arrangements of the workshop during the conference days. We are grateful to the INCoS-2012 Conference Chairs for inviting us to be the workshops co-chairs of the conference.

We hope you will enjoy the workshops programs and discussions during the conference days and enjoy your stay in Bucharest, Romania!

INCOS-2012 Workshops Co-Chairs

Costin Raiciu, University Politehnica of Bucharest, Romania
Stavros Demetriadis, Aristotle University of Thessaloniki, Greece
Kin Fun Li, University of Victoria, Canada

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Makoto Takizawa, Seikei University, Japan

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Fatos Xhafa, Technical University of Catalonia (UPC), Spain
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Xiaofeng Chen, Xidian University, China
Ajith Abraham, MIR Labs, USA

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Kaori Yoshida, Kyushu Institute of Technology (KIT), Japan
Albert Zomaya, University of Sydney, Australia
Kin Fun Li, University of Victoria, Canada

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Kin Fun Li, University of Victoria, Canada

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Farookh Hussain, Curtin University, Australia

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Eleana Apostol, University Politehnica of Bucharest, Romania

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Elis Kulla, Fukuoka Institute of Technology (FIT), Japan

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Leonard Barolli, Fukuoka Institute of Technology, (FIT), Japan

Valentin Cristea, University Politehnica of Bucharest, Romania

IEEE INCoS-2012 Conference Track Chairs

Track 1: Cloud Computing: Services, Storage, Security and Privacy

Jin Li, Guangzhou University, China (Track Co-Chair) Qiang Tang, University of Twente, the Netherlands, (Track Co-Chair)

Track 2: Data Mining, Machine Learning and Collective Intelligence

Pavel Krmer, VSB Technical University of Ostrava, Czech Republic (Track Co-Chair) Vclav Snasel, VSB-TU Ostrava, Czech Republic (Track Co-Chair)

Track 3: Fuzzy Systems and Knowledge Management

Eulalia Szmidt, Systems Research Institute, Polish Academy of Sciences, Poland (Track Chair)

Track 4: Grid and P2P Distributed Infrastructure for Intelligent Networking and Collaborative Systems

Richard Hill, University of Derby, UK (Track Chair) Mugurel Andreica, Politehnica University of Bucharest, Romania

Track 5: Intelligent Collaborative Systems for Work and Learning, Virtual Organization and Campuses

Chih-Chun Chen, French National Centre for Scientific Research, France (Track Co-Chair) Viorel Negru, West University of Timisoara, Romania (Track Co-Chair)

Track 6: Methodology, Analysis & Sustainability of Intelligent Networking and Collaborative Systems

Murat Cakir, METU Informatics Institute, Turkey (Track Co-Chair) Thanasis Daradoumis, University of the Aegean, Greece (Track Co-Chair)

Track 7: Nature's Inspired Multi-agent Collaborative Systems

Crina Grosan, Technical University of Cluj-Napoca, Romania (Track Co-Chair) Hisayuki Sasaoka, Asahikawa National College of Technology, Japan (Track Co-Chair)

Track 8: Networking and Collaboration at School (Special track)

Tharrenos Bratitsis, University of Western Macedonia, Greece (Track Co-Chair) Costin Boiangiu, Politehnica University of Bucharest, Romania (Track Co-Chair)

Track 9: Next Generation Network Protocols and Components

Dirceu Cavendish, UCLA, USA (Track Co-Chair) Emil Cebuc, Technical University of Cluj-Napoca, Romania (Track Co-Chair)

Track 10: Poster Paper Tracks

Masato Tsuru, Kyushu Institute of Technology, Japan (Track Chair)

Track 11: Security, Organization, Management and Autonomic Computing for Intelligent Networking and Collaborative Systems

Joonsang Baek, KUSTAR, UAE (Track Co-Chair) Xinyi Huang, Fujian Normal University, China (Track Co-Chair)

Track 12: Semantics and Ontologies for Networking and Collaborative Systems

Jordi Conesa, Open University of Catalonia, Spain (Track Co-Chair) Santi Caballé, Open University of Catalonia, Spain (Track Co-Chair)

Track 13: Software Engineering for Intelligent Networking and Collaborative Systems

Santi Caballé, Open University of Catalonia, Spain (Track Co-Chair) Robert Claris, Open University of Catalonia, Spain (Track Co-Chair)

Track 14: Wireless and Sensor Systems for Intelligent Networking and Collaborative Systems

Razvan Rughinis, University Politehnica of Bucharest, Romania (Track Co-Chair) Hiroyoshi Miwa, Kwansai University, Japan (Track Co-Chair)

Welcome Message from the EIDWT-2012 International Conference Organizers

Welcome to the 3-rd International Conference on Emerging Intelligent Data and Web Technologies (EIDWT 2012), which will be held in conjunction with the 4-th International Conference on Intelligent Networking and Collaborative Systems (INCoS 2012) from September 19 to September 21, 2012, at University Politehnica of Bucharest, Bucharest, Romania.

The EIDWT is dedicated to the dissemination of original contributions that are related to the theories, practices and concepts of emerging data technologies yet most importantly of their applicability in business and academia towards a collective intelligence approach. In particular, EIDWT 2012 will discuss advances about utilizing and exploiting data generated from emerging data technologies such as Data Centres, Data Grids, Clouds, Crowds, Mashups, Social Networks and other Web 2.0 implementations towards a collaborative and collective intelligence approach leading to advancements of virtual organizations and their user communities. This is because, current and future Web and Web 2.0 implementations will store and continuously produce a vast amount of data, which if combined and analyzed through a collective intelligence manner will make a difference in the organizational settings and their user communities. Thus, the scope of EIDWT 2012 includes methods and practices which bring various emerging data technologies together to capture, integrate, analyze, mine, annotate and visualize data in a meaningful and collaborative for the organization manner. Finally, EIDWT 2012 aims to provide a forum for original discussion and prompt future directions in the area.

The EIDWT 2012 consists of the main conference and 6 workshops. We received 97 papers, and out of them 26 were accepted in the main conference (about 27% acceptance ratio), for presentation during the conference days.

An international conference requires the support and help of many people. A lot of people have helped and worked hard for a successful EIDWT 2012 technical program and conference proceedings. First, we would like to thank all the authors for submitting their papers. We are indebted to Program Area chairs, Program Committee members, and reviewers who carried out the most difficult work of carefully evaluating the submitted papers. We would like to give our special thanks to Nicolae Tapus, University Politehnica Bucharest, Romania and Makoto Takizawa, Seikei University, Japan, as the Honorary Chairs of EIDWT 2012, for their guidance and support. We would like to give our thanks to Workshop Co-Chairs Prof. Dana Petcu, West University of Timisoara, Romania and Dr. Richard Hill, University of Derby, UK. We appreciate the work of all area chairs. We would like to express our appreciation to our keynote speakers for accepting our invitation and delivering very interesting key notes at the conference. We would like as well to thank the Local Arrangements Chairs for making excellent local arrangements for the conference. Finally, we would like to give special thanks to Cisco Systems Inc. and Intel Romania for supporting our conference.

We hope you will enjoy the conference and have a great time in Bucharest, Romania.

EIDWT 2012 Steering Committee Co-Chairs

Leonard Barolli, Fukuoka Institute of Technology, Japan (Chair)

Fatos Xhafa, Technical University of Catalonia, Spain

Nik Bessis, University of Derby, UK

Valentin Cristea, University Politehnica Bucharest, Romania

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Nik Bessis, University of Derby, UK

Fatos Xhafa, Technical University of Catalonia, Spain

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Natalia Kryvinska, University of Vienna, Austria

Maozhen Li, Brunel University, UK

Message from the Workshops Co-Chairs of EIDWT 2012 International Conference

Welcome to the Workshops of the 3-rd International Conference on Emerging Intelligent Data and Web Technologies (EIDWT 2012), which will be held in conjunction with the 4-th International Conference on Intelligent Networking and Collaborative Systems (INCoS 2012) from September 19 to September 21, 2012, at University Politehnica of Bucharest, Bucharest, Romania.

In this edition of the conference, six workshops will be held in conjunction with EIDWT 2012 International Conference. The workshops cover specific topics related to situated computing, pervasive computing, large scale systems, service oriented systems, green technology, Web socialization sustainability, cybercrimes, emerging Web environments, new systems and tools, learning systems and technologies. The workshops are the following:

1. The 2-nd International Workshop on Situated Computing for Pervasive Environments (SCOPE-2011)
2. The 2-nd International Workshop on the Service for Large Scale Distributed Systems (SeDiS-2011)
3. The 1-st Workshop on Migrating Legacy Applications to Service Oriented Systems (MILES-2012)
4. The 1-st International Workshop on Cybercrimes and Emerging Web Environments (CEWE-2012)
5. The 1-st International Workshop on Development and Implementation of New Systems and Tools (DINST-2012)
6. The 1-st International Workshop on Connecting Analyses of Learning across Levels and Modalities (C2ALM-2012)

The Workshop Chairs would like to sincerely thank the efforts of the workshop organizers for the successful organization of their workshops, for carefully selecting the papers and the interesting program.

We hope you enjoy the workshops programs and proceedings.

EIDWT 2012 Workshops Co-Chairs

Dana Petcu, West University of Timisoara, Romania
Leonard Barolli, Fukuoka Institute of Technology, Japan
Richard Hill, University of Derby, UK

EIDWT-2012 Conference Organizing Committee

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Makoto Takizawa, Seikei University, Japan

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Nik Bessis, University of Derby (also at University of Bedfordshire), UK
Fatos Xhafa, Technical University of Catalonia, Spain

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Maozhen Li, Brunel University, UK

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Leonard Barolli, Fukuoka Institute of Technology, Japan
Richard Hill, University of Derby, UK

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Christine Strauss, University of Vienna, Austria

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Eleana Apostol, University Politehnica Bucharest, Romania
MihaiDascalu, University Politehnica Bucharest, Romania

Special Issue Chair

Lei Shu, Osaka University, Japan

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Nik Bessis, University of Derby (also at University of Bedfordshire), UK
Valentin Cristea, University Politehnica Bucharest, Romania

Treasure Chair

Valbona Barolli, Seikei University, Japan

Web Administrators

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

EIDWT-2012 Conference Track Chairs

Track 1: Social Networking and Mining

Ashiq Anjum, UNiversity of Derby, UK
Demosthenes Akoumianakis, ATEI, Greece

Track 2: Natural Inspired Computing for Collective Intelligence

Lei Shu, Osaka University, Japan
Zhangbing Zhou, Institute Telecom & Management SudParis, France

Track 3: Groupware and Online Campuses

Liz Bacon, University of Greenwich, UK
Vlad Posea, University Politehnica of Bucharest, Romania

Track 4: Ontologies and Metadata Representation

Kuan-Chou Lai, National Taichung University, Taiwan
Jason Chi-Shun Hung, Overseas Chinese University, Taiwan
Nicoleta Preda, University of Versailles, France

Track 5: Knowledge Discovery and Data Mining

Sergio Toral, University of Seville, Spain
Fabrice Guillet, Ecole Polytechnique de l'Universite de Nantes, France

Track 6: Security, Trust and Reputation

Stilianos Vidalis, University of Wales, UK
Victor Patriciu, Technical Military Academy of Bucharest, Romania

Track 7: Web Science and Business Intelligence

Ioannis Anagnostopoulos, University of Central Greece, Greece
Michalis Vafopoulos, Aristotle University of Thessaloniki, Greece

Track 8: Data Management and Information Retrieval

Yue-Shan Chang, National Taipei University, Taiwan
Traian Rebedea, University POLITEHNICA of Bucharest, Romania

Track 9: Data Modelling, Visualisation and Representation Tools

Thomas Hacker, Purdue University, USA
Nazar Zaki, United Arab Emirates University, UAE

Track 10: Data Centers and Cloud Computing

Lu Liu, University of Derby, UK
Corina Stratan, Vrije Universiteit Amsterdam, Holland

Track 11: Management of Big Data in Clouds

Alexandru Costan, INRIA Rennes, France

Gabriel Neagu, National Institute for Research & Development in Informatics

Track 12: Ubiquitous Intelligence and Reality Mining

Stefan Schaeckeler, Cisco Systems, USA

Dhiya Al-Jumeily, Liverpool John Moores University, UK

IEEE INCoS-2012 Keynote

Dr. Liqun Chen, Hewlett-Packard Laboratories, UK

Solving Privacy Problems with Anonymous Digital Signatures

Abstract: Today, digital signatures are widely used in computer science and information security to provide services such as entity authentication, data origin authentication, non-repudiation and data integrity. Anonymous digital signatures are a special type of digital signature. In an anonymous digital signature scheme, an unauthorised entity, including a verifier, cannot discover the signer's identifier from the digital signature. However, such a scheme still only allows a legitimate signer to generate a valid signature. In this talk, we will introduce various categories of anonymous digital signatures, such as group signatures, ring signatures, direct anonymous attestation, concurrent signatures, and ring group signatures. We will discuss privacy problems in the real world, particularly in the areas of trusted computing and cloud computing, and we will investigate which digital signature can be applied to solve a specific problem. Finally, we will look at a few international standards relating to anonymous digital signatures.

EIDWT-2012 Keynote

Dr. Muhammad Younas, Oxford Brookes University, Oxford, UK

Context-aware Transaction Management in Pervasive and Mobile Computing

Abstract: Rapid advances in pervasive and mobile computing technologies provide new, open and flexible environment in which devices and services are context-aware, adaptive and responsive to users needs and execution environment. It provides an infrastructure for anywhere/anytime service provisioning in different domains, for example, businesses, engineering, education, and entertainment. This style of service provisioning enables users to freely move between geographical areas and to continuously access information and conduct online transactions. However, majority of information and services currently available to users are through read only queries such as news bulletin, weather information, and product prices. But in order to fully realize the vision of the pervasive and mobile computing it is imperative to extend service provisioning beyond read only capacity and to allow for update operations (transactions) on data and services. Consider for example a scenario of car insurance services which can be made available to users (drivers and insurance staff) through mobile devices. In case of an accident or a car breakdown, drivers can use their mobile phones to make claims and request for recovery services. In order to process such requests insurance company staff have to complete a number of tasks such as finding information about the car and its driver, police reports, accident information, location of accident or breakdown, etc. In certain cases, staff are required to physically visit the location and examine the damaged car in order to provide cost estimate for insurance claims. This talk presents a context-aware transaction model that dynamically adapts to the users' needs and execution environments in pervasive and mobile computing - e.g., in the above scenario, transactions can be used to correctly and consistently complete the different tasks involved in the insurance claim. This talk will first introduce the new model for the management of context-aware transactions. It will then present the protocol for the execution of context-aware transactions. It will also discuss a mobility management scheme for context-aware transactions and will identify directions for future research.



IEEE INCoS-2012 Main Conference and Workshops Program

Wednesday, September 19, 2012

08:00 Registration

09:00-10:30 Single Session: Opening & IEEE INCoS-2012 Keynote

IEEE INCoS-2012 Keynote Talk

Dr. Liqun Chen, Hewlett-Packard Laboratories, UK

Solving Privacy Problems with Anonymous Digital Signatures

10:30-11:00 Coffee Break

11:00-12:30 Parallel Sessions

INCoS-S1: Vehicular Networking and MANETs - Room INCoS 1

Chair: Valentin Cristea, University Politehnica Bucharest, Romania

1. An Improved Binary Authentication Tree Algorithm for Vehicular Networks
Huaqun Wang, Bo Qin, Josep Domingo-Ferrer
2. Securing Vehicular Networks Using Deterministic Schemes for Computing Trust
Mihaela Teler, Valentin Cristea
3. A Lightweight Anonymous Authentication Scheme for VANET Based on Bilinear Pairing
Hui Zhu, Wenhai Pan, Beishui Liu, Hui Li
4. The Analysis of Mobility Models in MANETs with Two-Hop Relay Algorithm
Ying Cai, Xiaofei Wang, Yuqing Zhang

INCoS-S2: Intelligent and Immune Systems - Room INCoS 2**Chair: Kin Fun Li, University of Victoria, Canada**

1. Independent Task Scheduling by Artificial Immune Systems, Differential Evolution, and Genetic Algorithms
Pavel Kromer, Jan Platos, Vaclav Snasel
2. Assistance to Trainers for the Observation and Analysis Activities of Operators Trainees on Nuclear Power Plant Full-Scope Simulator
Olivier Champalle, Karim Sehaba, Dino Cosmas, Alain Mille, Yannick Prié
3. Improving Compression Using Words
Jan Platos, Pavel Kromer
4. Collection and Classification of Tennis Swings Using a Virtual Racket
Ana-Maria Sevcenco, Kin Fun Li, Kosuke Takano

INCoS-S3: Machine Learning and Agent Systems - Room INCoS 3**Chair: Fatos Xhafa, Technical University of Catalonia**

1. DOA Estimation Using Multiple Kernel Learning SVM Considering Mutual Coupling
Mehdi Dehghanpour, Vahid TabaTaba Vakili, Ali Farrokhi
2. A Multi-agent Matchmaker Based on Hidden Markov Model for Decentralized Grid Scheduling
Holman Bolívar Baron, Mario Martínez Rojas, Rubén González Crespo, Oscar Sanjuan Martínez
3. A Struggle Genetic Algorithm for Ground Stations Scheduling Problem
Fatos Xhafa, Xavier Herrero, Admir Barolli, Makoto Takizawa
4. A Normalized Local Binary Fitting Model for Image Segmentation
Yali Peng, Fang Liu, Shigang Liu

W-C3WM-S1: Resource Allocation - Room INCoS 4**Chair: Jing Li, Xidian University, China**

1. Energy-Aware Joint Power and Rate Control in Overlay Cognitive Radio Networks: A Nash Bargaining Perspective
Chungang Yang, Min Sheng, Jiandong Li, Hongyan Li, Jing Li
2. Game-Theoretic Resource Allocation of the Cognitive Base Station in Two-Tier Co-existing Femtocell Networks
Jing Song, Jianhua Ge, Jing Li, Li Cong
3. Outage-Optimal Power Allocation for Space-Time Cooperative Network Coding with Amplify-and-Forward
Yancheng Ji, Guoan Zhang, Xiaoge Zhang, Xun Huang

12:30-14:00 Lunch Break**14:00-15:30 Parallel Sessions****INCoS-S4: E-learning and Collaborative Systems - Room INCoS 1****Chair: Santi Caballé, Open University of Catalonia, Spain**

1. An Advising System for Supporting Users of Collaborative Activities in LMSs
Themistoklis Chronopoulos, Ioannis Hatzilygeroudis

2. Orchestrating Adaptive and Complex CSCL Scenarios through a Choreography among IMS-LD and External Services
Ioannis D. Magnisalis, Stavros N. Demetriadis
3. Providing Security to Computer-Supported Collaborative Learning: An Overview
Jorge Miguel, Santi Caballé, Josep Prieto

INCoS-S5: Optimization in Networked Systems - Room INCoS 2**Chair: Mario Koeppen, Kyushu Institute of Technology, Japan**

1. A Relational Approach to Collaborative Fairness
Mario Koppen, Rodrigo Verschae, Masato Tsuru
2. Optimization Transmission for Improving Degrees of Freedom in MIMO Y Channel
Yong Wang, Aixiang Guo, Hong He, Hui Li
3. Transmission Rate Control Utilizing Chaotic Nature of Coupled Oscillators
Yuri Takahashi, Chisa Takano, Yusuke Sakamoto, Masaki Aida

INCoS-S6: Social Networking, Grid, and P2P Systems - Room INCoS 3**Chair: Florin Pop, University Politehnica Bucharest, Romania**

1. Internet of Things as Virtual Settlements: Insights from Excavating Social Media Sites
Demosthenes Akoumianakis, Nikolas Karadimitriou, George Vlachakis, Giannis Milolidakis, Nik Bessis
2. Networking Tactics for Online eHealth Campaigns and Intervention Studies: Preliminary Results from a Case Study on Nutritional Support for Cancer Patients
Demosthenes Akoumianakis, Giannis Milolidakis, Patrizia Gnagnarella, Alessandro Maria Misotti, Nik Bessis
3. A P2P Traffic Localization Method with Additional Delay Insertion
Takumi Miyoshi, Yuki Shinozaki, Olivier Fourmaux
4. Grid Configuration and Application Monitoring in GridGain
Florin Pop, Maria-Alexandra Lovin, Catalin Negru, Valentin Cristea, Nik Bessis, Stelios Sotiriadis

W-C3WM-S2: Cooperative Transmission - Room INCoS 4**Chair: Jing Li, Xidian University, China**

1. Network-Coding-Based Hybrid-ARQ for Two-Way Relaying
Xiaoye Shi, Jianhua Ge, Yancheng Ji, Chuiqiang Sun
2. Cooperative Transmission with Broadcasting and Communication
Dongdong Wei, Lei Deng, Yun Rui, Mingqi Li, Fang Wang
3. Novel Distributed Turbo Coding Scheme in Two-Hop Relay Networks
Defeng Ren, Jianhua Ge, Xiaoye Shi
4. Coordinated Multimode (Cellular - WSN) User Equipment Accessing Wireless Sensor Network Mechanism
Jun Xia, Rui Yun, Kai Yu, Fei Yin, Haifeng Wang, Zhiyong Bu

15:30-16:00 Coffee Break**16:00-17:30 Parallel Sessions**

INCoS-S7: Artificial and Agent-Based Collaborative Systems - Room INCoS 1**Chair: Nik Bessis, University of Derby, UK**

1. Optimizing the Energy Efficiency of Message Exchanging for Service Distribution in Interoperable Infrastructures
Nik Bessis, Stelios Sotiriadis, Florin Pop, Valentin Cristea
2. Using a Conversational Agent for Promoting Collaborative Language Learning
Stergios Tegos, Stavros Demetriadis, Thrasyvoulos Tsiatsos
3. Evaluation for Acquiring Method for Agents' Actions with Ant Colony Optimization in Robo Cup Rescue Simulation System
Hisayuki Sasaoka
4. Online Cooperative Behavior Planning Using a Tree Search Method in the RoboCup Soccer Simulation
Hidehisa Akiyama, Shigeto Aramaki, Tomoharu Nakashima

INCoS-S8: Security and Cloud Computing - Room INCoS 2**Chair: Richard Hill, University of Derby, UK**

1. A Novel Framework for Outsourcing and Sharing Searchable Encrypted Data on Hybrid Cloud
Jingwei Li, Chunfu Jia, Jin Li, Zheli Liu
2. Implementing a Personal Health Record Cloud Platform Using Ciphertext-Policy Attribute-Based Encryption
Changji Wang, Xuan Liu, Wentao Li
3. A Non-interactive Secure Outsourced Computation Scheme in Multi-party Cloud
Shu Guo, Haixia Xu
4. Improving Cloud Datacentre Scalability, Agility and Performance Using OpenFlow
Charlie Baker, Ashiq Anjum, Richard Hill, Nik Bessis, Saad Liaquat Kiani

INCoS-S9: Security and Authentication I - Room INCoS 3**Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan**

1. An Efficient Probably CP-CM-Secure Identity-Based Signature Scheme Applicable to Authentication in Multiuser Settings
Xi Sun, Zhengtao Jiang, Meirong Zhou, Yumin Wang
2. ESLRAS: A Lightweight RFID Authentication Scheme with High Efficiency and Strong Security for Internet of Things
Kai Fan, Jie Li, Hui Li, Xiaohui Liang, Xuemin (Sherman) Shen, Yintang Yang
3. Cryptanalysis of a Certificateless Encryption Scheme in the Standard Model
Limin Shen, Futai Zhang, Yinxia Sun, Sujuan Li
4. Dynamic Group Based Authentication Protocol for Machine Type Communications
Yueyu Zhang, Jie Chen, Hui Li, Wujun Zhang, Jin Cao, Chenzhe Lai

W-C3WM-S3: Cognitive Networks - Room INCoS 4**Chair: Chungang Yang, Xidian University, China**

1. Interference Alignment with Complex FDPM-Based Subspace Tracking in MIMO Cognitive Networks
Bin Zhu, Jianhua Ge, Xiaoye Shi, Yunxia Huang
2. A Leakage-Based Precoding Scheme for Cognitive Multiuser MIMO Systems
Chuiqiang Sun, Jianhua Ge, Xinxin Bao, Xiaoye Shi

3. Impartial Spectrum Decision under Interference Temperature Model in Cognitive Wireless Mesh Networks

Yun Yang, Guo-an Zhang, Yan-cheng Ji

19:00-21:00 Welcome Reception Party

Thursday, September 20, 2012**08:00 Registration****09:00-10:30 Single Session: EIDWT-2012 Keynote****EIDWT-2012 Keynote Talk****Dr. Muhammad Younas, Oxford Brookes University, Oxford, UK**

Context-aware Transaction Management in Pervasive and Mobile Computing

10:30-11:00 Coffee Break**11:00-12:30 Parallel Sessions****INCoS-S10: Ontology and Semantic Collaborative Systems - Room INCoS 1****Ladjel Bellatreche, Ecole Nationale Suprieure de Mcanique et d'Arotechnique**

1. A Methodology for Ontology Evaluation Using Topic Models
Aryya Gangopadhyay, Matthew Molek, Yelena Yesha, Mary Brady, Yaacov Yesha
2. Towards an Ontological Approach to Enrich a Community of Interest in Orthopaedic Specialty
M.E. Riu, D. Baneres, J. Conesa
3. Generic Methodology for Semantic Data Warehouse Design: From Schema Definition to ETL
Nabila Berkani, Selma Khouri, Ladjel Bellatreche
4. A Semantic Framework for Delivery of Context-Aware Ubiquitous Services in Pervasive Environments
Alba Amato, Beniamino Di Martino, Salvatore Venticinqu

INCoS-S11: Mobile and Location-Based Collaborative Systems - Room INCoS 2**Chair: Jordi Conesa, Open University of Catalonia, Spain**

1. Itiner@: Ontology for Personalizing Tourist Routes in Mobile Devices
Laila Descamps-Vila, Jordi Conesa, Antoni Prez-Navarro
2. SOSCast: Location Estimation of Immobilized Persons through SOS Message Propagation
Noriyuki Suzuki, Jane Louie Fresco Zamora, Shigeru Kashihara, Suguru Yamaguchi
3. A Message Forward Scheduling Based on a Secretary Problem for Mobile Relay Nodes
Takuya Tsuruiki, Kazuya Tsukamoto, Masato Tsuru, Yuji Oie
4. Implementation of High Complex Routing Algorithms in Mobile Devices: The Itiner@ Case
Laila Descamps-Vila, Jordi Conesa, Antonio Perez-Navarro

W-LSNS-S1: Security Analysis - Room INCoS 3**Chair: Xinyi Huang, Fujian Normal University, China**

1. On the Security of a Multi-use CCA-Secure Proxy Re-encryption Scheme
Jindan Zhang, Xu An Wang
2. Lattice Attack on the Knapsack Cipher 0/255
Baocang Wang, Hao Lei

3. Security Analysis of a Multi-use Identity Based CCA-Secure Proxy Re-encryption Scheme
Jindan Zhang, Xu An Wang
4. Further Cryptanalysis of a Signature Scheme with Message Recovery
Lei Niu, Yong Yu, Jianbing Ni, Ying Sun

12:30-14:00 Lunch Break

14:00-15:30 Parallel Sessions

INCoS-S12: Intelligent Traffic and Disaster Management - Room INCoS 1

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

1. Performance Evaluation of Virtual Segment Method Based on Actual Road Network Topology at the Time of the Great East Japan Earthquake
Yuta Kimura, Hiroshi Tsuji, Hiroyoshi Miwa
2. Effect of Traffic Volume in Real-Time Disaster Evacuation Guidance Using Opportunistic Communications
Akihiro Fujihara, Hiroyoshi Miwa
3. Learning the Classification of Traffic Accident Types
Tibebe Beshah, Dejene Ejigu, Pavel Kromer, Vaclav Snasel, Jan Platos, Ajith Abraham

INCoS-S13: Wireless, Ad Hoc, and Sensor Networking - Room INCoS 2

Chair: Mario Koeppen, Kyushu Institute of Technology, Japan

1. A Benchmark for Evaluating Approximated Algorithms for Fair Wireless Channel Allocation
Rodrigo Verschae, Mario Koeppen, Masato Tsuru
2. The Wireless Vertical Handoff Decision Algorithm with Parameter Prediction
Yulong Shen, Ning Xi, Qingqi Pei, Jianfeng Ma, Yudi Niu
3. Neighbour Traffic-Aware Load Balancing Method in Ad Hoc Networks
Ryo Yamamoto, Takumi Miyoshi, Yoshiaki Tanaka
4. Distributed Image Encoding Scheme Using LDPC Codes over GF(q) on Wireless Sensor Networks
Phat Nguyen Huu, Vinh Tran-Quang, Takumi Miyoshi

W-LSNS-S2: Attack and Design - Room INCoS 3

Chair: Bo Qin, University Rovira i Virgili, Spain

1. Key Recovery Attack on a Knapsack Public Key Cryptosystem
Chunfei Ju, Hui Yuan
2. Identity-Based Proxy Signature for Cloud Service in SaaS
Xi Cao, Li Xu, Yuesin Zhang, Wei Wu
3. Efficient and Secure Batch Exponentiations Outsourcing in Cloud Computing
Xu Ma, Jin Li, Fangguo Zhang
4. A New Identity Based Signcryption Scheme in the Standard Model
Bo Qin, Huaqun Wang, Qianhong Wu, Jianwei Liu, Josep Domingo-Ferrer

W-SIoT-S1: Data Security and Management - Room INCoS 4**Chair: Razvan Rughinis, University Politehnica of Bucharest, Romania**

1. Inference Detection and Database Security for a Business Environment
Traian Popeea, Anca Constantinescu, Laura Gheorghe, Nicolae Tapus
2. A Comparative Evaluation of Private Information Retrieval Techniques in Location-Based Services
Sergiu Costea, Dumitru Marian Barbu, Gabriel Ghinita, Razvan Rughinis
3. Optimized Directional Content Distribution Using Reputation
Andreea Urzica, Mircea Bardac
4. Securing Virtual Networks for Multi-owner Wireless Sensor Networks
Laura Gheorghe, Dan Tudose, Markus Wehner, Sven Zeisberg
5. Adaptive Security Framework for Wireless Sensor Networks
Laura Gheorghe, Razvan Rughinis, Nicolae Tapus

15:30-16:00 Coffee Break

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16:00-17:30 Single Session**Poster Session****Chair: Masato Tsuru, Kyushu Institute of Technology, Japan**

1. A Composability Model for Efficient Web Service's Connectivity
Hajar Omrana, Fatima-Zahra Belouadha, Ounsa Roudies
2. Collaborative Systems for Building Automation
Ioan Valentin Sita
3. Towards Programmatic Management of Services from Multiple Clouds
Dana Petcu, Marc E. Frincu, Silviu Panica, Marian Neagul
4. Management of Software Driven Networks - Research Challenges
Alex Galis, Stuart Clayman
5. Opengate on OpenFlow: System Outline
Mitsuhiro Suenaga, Makoto Otani, Hisaharu Tanaka, Kenzi Watanabe
6. End-to-End Header Compression over Software-Defined Networks: A Low Latency Network Architecture
Supalerk Jivorasetkul, Masayoshi Shimamura, Katsuyoshi Iida
7. Rule Based Expert Systems Running over the Cloud
Traian-Lucian Militaru, George Suciu, Gyorgy Todoran, Anisia Florescu, Vlad Poenaru, Laurentiu Nae, Cristian Cernat
8. Secure Provable Data Possession for Object Storage System
Zhefeng Zou, Zhen Wang, Xiaoping Yuan, Peng Liu
9. Comment on Anonymous Multi-receiver Identity-Based Encryption Scheme
Jianhong Zhang, Yuwei Xu
10. How Can Semantic Be Introduced in GIS Mobile Applications: Expectations, Theory and Reality
Laila Descamps-Vila, Jordi Conesa, Antoni Perez-Navarro

19:00-21:00 Banquet Party

Friday, September 21, 2012**08:00 Registration****09:00-10:30 Parallel Sessions****INCoS-S14: Security and Authentication II - Room INCoS 1****Chair: Fatos Xhafa, Technical University of Catalonia, Spain**

1. A New Variant of the Cramer-Shoup Leakage-Resilient Public Key Encryption
Sujuan Li, Futai Zhang, Yinxia Sun, Limin Shen
2. Unsupervised Human Action Categorization Using Latent Dirichlet Markov Clustering
Xudong Zhu, Hui Li
3. End-to-End Security Scheme for Machine Type Communication Based on Generic Authentication Architecture
Wujun Zhang, Yueyu Zhang, Jie Chen, Hui Li, Yumin Wang
4. Improvement of Provably Secure Self-Certified Proxy Convertible Authenticated Encryption Scheme
Qi Xie, Guilin Wang, Fubiao Xia, Deren Chen

INCoS-S15: Encoding, Malware, and Adversarial Systems - Room INCoS 2**Chair: Valentin Cristea, University Politehnica of Bucharest, Romania**

1. ET-DMD: An Error-Tolerant Scheme to Detect Malicious File Deletion on Distributed Storage
Jian Mao, Yan Zhang, Xiandong Xu, Jianwei Liu, Tao Wei
2. A Self-Calibration Method Based on Two Pairs of Orthogonal Parallel Lines
Lugang Zhao, Chengke Wu, Shigang Liu
3. Deniably Information-Hiding Encryptions Secure against Adaptive Chosen Ciphertext Attack
Chong-zhi Gao, Dongqing Xie, Jin Li, Baodian Wei, Haibo Tian
4. Joint Signal Space Alignment and Precoding in Two-Way Relay Multi-user Networks
Yong Wang, Liu Yang, Yun Ai, Hui Li, Weidong Zhang

W-CIDM-S1: Advanced Methods for Disaster Management - Room INCoS 3**Chair: Nik Bessis, University of Derby, UK**

1. Optimizing Task Allocation on Fire Fighting
Frank-Gerrit Poggenpohl, Dennis Gttinger
2. Interconnectedness of Complex Systems of Internet of Things through Social Network Analysis for Disaster Management
Asta Zelenkauskaitė, Nik Bessis, Stelios Sotiriadis, Eleana Asimakopoulou
3. Disaster Management and Profile Modelling of IoT Objects: Conceptual Parameters for Interlinked Objects in Relation to Social Network Analysis
Asta Zelenkauskaitė, Nik Bessis, Stelios Sotiriadis, Eleana Asimakopoulou
4. Context Based Access Control in Pervasive Environments
Alexandru Petculescu

W-FINCoS-S1: Intelligent Collaborative Systems - Room INCoS 4**Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan**

1. Building Control, Monitoring, Safety and Security Using Collaborative Systems
Ioan Valentin Sita
2. Constructing Designated-Verifier Ring Signature and Ring Signcryption under the k-CCA2 Assumption
Fu Xiao-tong, Liu Wen
3. A Practical Metadata Model for Access Control Modules
Alexandru Petculescu
4. The Spiral-In Method for Designing and Connecting Learning Objects
Eugenios Vlachos
5. Social Capital in Virtual Organizations
Saad Alqithami, Henry Hexmoor

10:30-11:00 Coffee Break**11:00-12:30 Parallel Sessions****INCoS-S16: Security Computation Schemes - Room INCoS 1****Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan**

1. A Non-delegatable Strong Designated Verifier Signature without Random Oracles
Haibo Tian, Zhengtao Jiang, Yi Liu, Baodian Wei
2. On the Security of an Enhanced ID-Based Anonymous Proxy Signature Scheme in ICCAE2010
Jianhong Zhang, Yuwei Xu
3. Multi-party Computation with Social Rational Parties
Yilei Wang, Qiuliang Xu, Zhe Liu
4. Physical-Layer Network Coding and Connected Dominating Set Based Routing Protocol in Wireless Multi-hop Network
Li Xu, Penggui Pan, Xiaoding Wang, Wei Wu

INCoS-S17: Security and Encryption - Room INCoS 2**Chair: Xiaofeng Chen: Xidian University, China**

1. DCCA-Secure Public-Key Encryptions from Hybrid Paradigms
Yuan Chen, Xiaofeng Chen, Hui Li
2. Complementary Witness Soundness Witness Indistinguishable Proof System and CCA2 Public-Key Encryption Schemes
Haixia Xu, Bao Li, Qixiang Mei
3. A Trusted Authentication Scheme for Wireless Networks Using Direct Anonymous Attestation
Li Yang, Jianfeng Ma, Zhihong Liu, Ruofan Zheng
4. A Strong Designated Verifier Signature Scheme with Secure Disavowability
Bo Yang, Ying Sun, Yong Yu, Qi Xia

INCoS-S18: Cryptanalysis and Privacy - Room INCoS 3**Chair: Bo Qin, University Rovira i Virgili, Spain**

1. Toward Quantum-Resistant Strong Designated Verifier Signature from Isogenies
Xi Sun, Haibo Tian, Yumin Wang
2. Cryptanalysis of an Efficient Three-Party Key Exchange Protocol
Xiaotong Fu, Ruijun Shi
3. Secure Similarity Coefficients Computation with Malicious Adversaries
Bo Zhang, Fangguo Zhang
4. Privacy-Preserving Affinity Propagation Clustering over Vertically Partitioned Data
Xiaoyan Zhu, Momeng Liu, Min Xie

W-MC2-S1: Motion Capture and Classification - Room INCoS 4**Chair: Kin Fun Li, University of Victoria, Canada**

1. A Comparative Study between Spatial-Temporal Orthogonal Moments for Volumes Description
Manel Boutaleb, Imen Lassoued, Ezzeddine Zagrouba
2. An Overview of Gait Analysis and Step Detection in Mobile Computing Devices
Michael L. McGuire
3. Virtual Drums Based on Natural Interaction
Jacob Wilschrey, Cristian Rusu, Ivan Mercado, Rodolfo Inostroza, Cristhy Jimenez
4. Biomechanical Validation of Upper-Body and Lower-Body Joint Movements of Kinect Motion Capture Data for Rehabilitation Treatments
Adso Fernandez-Baena, Antonio Susin, Xavier Lligadas

12:30-14:00 Lunch Break



EIDWT-2012 Main Conference and Workshops Program

Wednesday, September 19, 2012

08:00 Registration

09:00-10:30 Single Session: Opening & IEEE INCoS-2012 Keynote

Dr. Liqun Chen, Hewlett-Packard Laboratories, UK

Solving Privacy Problems with Anonymous Digital Signatures

10:30-11:00 Coffee Break

11:00-12:30 Parallel Sessions

EIDWT-S1: Intelligent Computing and Collective Intelligence - Room EIDWT 1

Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan

1. Automatic Test Data Generation for Software Path Testing Using Evolutionary Algorithms
Gentiana Ioana Latiu, Octavian Augustin Cret, Lucia Vacariu
2. Visualization of Evolutionary Computation Process for Node Placement in WMNs Considering Weibull and Exponential Distribution of Mesh Clients
Admir Barolli, Tetsuya Oda, Evjola Spaho, Leonard Barolli, Fatos Xhafa, Makoto Takizawa
3. A Fuzzy-Based Simulation System for Cluster-Head Selection and Sensor Speed Control in Wireless Sensor Networks
Leonard Barolli, Qi Wang, Elis Kulla, Bezhel Kamo, Fatos Xhafa, Muhammad Younas
4. A Hierarchical Data Classification Model for Biometric Identification Systems
Sorin Soviany, Sorin Puscoci, Mariana Jurian

W-CEWE-S1: Cybercrime Prevention and Investigation - Room EIDWT 2**Chair: Olga Angelopoulou, University of Derby, UK**

1. Collecting Evidence from Large-Scale Heterogeneous Virtual Computing Infrastructures Using Website Capture
Tameem Chowdhury, Stilianos Vidalis
2. Combining Digital Forensic Practices and Database Analysis as an Anti-Money Laundering Strategy for Financial Institutions
Denys A. Flores, Olga Angelopoulou, Richard J. Self
3. Forensically Classifying Files Using HSOM Algorithms
Georgios Pierris, Stilianos Vidalis

12:30-14:00 Lunch Break**14:00-15:30 Parallel Sessions****EIDWT-S2: Cloud Computing - Room EIDWT 1****Chair: Nik Bessis, University of Derby, UK**

1. Semantic Web Annotation and Representation of Cloud APIs
Giuseppina Cretella, Beniamino Di_Martino
2. Advancing Inter-cloud Resource Discovery Based on Past Service Experiences of Transient Resource Clustering
Stelios Sotiriadis, Nik Bessis, Pierre Kuonen
3. Management of Cloud Infrastructures through Agents
Rocco Aversa, Luca Tasquier, Salvatore Venticinque

W-CEWE-S2: Security and Forensics - Room EIDWT 2**Chair: Olga Angelopoulou, University of Derby, UK**

1. A Proposed Framework for the Active Detection of Security Vulnerabilities in Multi-tenancy Cloud Systems
Jason Flood, Anthony Keane
2. Cloud Forensics: Concepts, Issues, and Challenges
Shahrzad Zargari, David Benford
3. On the Attacks over the Elliptic Curve-Based Cryptosystems
Gabriela Moise

15:30-16:00 Coffee Break**16:00-17:30 Parallel Sessions**

EIDWT-S3: Ad-Hoc Networks - Room EIDWT 1**Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan**

1. A MANET Simulation System: A Case Study Considering Static Source and Destination Nodes and OLSR Protocol
Elis Kulla, Makoto Ikeda, Leonard Barolli, Muhammad Younas, Kazunori Uchida, Rozeta Miho
2. Evaluation of a Framework for Measuring Efficiency in Opportunistic Ad-hoc Networks
Anthony Smith, Stuart Berry
3. A Comparison of Opportunistic Connection Datasets
Pedro Vieira, Antonio Costa, Joaquim Macedo
4. Performance Evaluation of AODV Protocol for Single and Multiple Traffic in MANETs Considering Packet Delivery Fraction Parameter
Makoto Ikeda, Elis Kulla, Masahiro Hiyama, Leonard Barolli, Muhammad Younas, Makoto Takizawa

W-C2ALM-S1: Theoretical Positions and Analysis of Multimodal Data - Room EIDWT 2**Chair: Murat Perit Cakir, Middle East Technical University, Turkey**

1. Supporting Group Cognition, Individual Learning and Community Practices in Dynamic Geometry
Gerry Stahl
2. Repetition as Artifact Generation in Polyphonic CSCL Chats
Stefan Trausan-Matu
3. Analyzing Coordination when Solving Geometry Problems with the Dynamic Geometry Software
Diler Oner
4. A Group Cognitive Perspective on the Multimodal Analysis of Learning
Murat Perit Cakir

19:00-21:00 Welcome Reception Party

Thursday, September 20, 2012**08:00 Registration****09:00-10:30 Single Session: EIDWT-2012 Keynote****Dr. Muhammad Younas, Oxford Brookes University, Oxford, UK**

Context-aware Transaction Management in Pervasive and Mobile Computing

10:30-11:00 Coffee Break**11:00-12:30 Parallel Sessions****EIDWT-S4: Data Modelling and Representation - Room EIDWT 1****Chair: Muhammad Younas, Oxford Brookes University, UK**

1. A New Methodology for Collecting and Exploiting Vast Amounts of Dynamic Data
Jacky Legrand, Eddie Soulier, Florie Bugeaud, Francis Rousseaux, Pierre Saurel, Houda Neffati
2. Retaining and Exploring Online Remains on YouTube
Demosthenes Akoumianakis, Ionannis Kafousis, Nikolas Karadimitriou, Manolis Tsiknakis
3. Failure Resilient Criteria for Mobile Web Services Transactions
Muhammad Younas, Leonard Barolli, Makoto Ikeda
4. Massive Processing of Activity Logs of a Virtual Campus
Fatos Xhafa, Juan José Ruiz, Santi Caballé, Evjola Spaho, Leonard Barolli, Rozeta Miho

W-DINST-S1: Systems and Tools - Room EIDWT 2**Chair: Kenzi Watanabe, Saga University, Japan**

1. Thinking Representation Tools for Science Education with Drawings
Toshihiro Hayashi, Hayashi Nakayama, Hiroyuki Tarumi
2. On the Road to Virtualized Environment
Hamse Yuusuf, Stilianos Vidalis
3. Household Energy Use and Creating Awareness: Opportunities for ICT
Jeroen Stragier, Laurence Hauttekeete, Lieven De_Marez, Jan Derboven, Lieve Laporte

W-SCOPE-S1: Opportunities in Emerging Technologies - Room INCoS 4**Chair: Nik Bessis, University of Derby, UK**

1. The Use of Crowdsourcing to aid Quest Design in Games
Sarah Carter, Martin Smith, Suweena Bali, Stelios Sotiriadis, Nik Bessis, Richard Hill
2. Customized Profile Accessibility and Privacy for Users of Social Networks
Ezinwa Okoro, Stelios Sotiriadis, Nik Bessis, Richard Hill
3. Performance Evaluation of Security Algorithms for the AODV MANET Routing Protocol
Alex Hinds, Stelios Sotiriadis, Nik Bessis, Nick Antonopoulos
4. Securing Authentication and Trusted Migration of Weblets in the Cloud with Reduced Traffic
John Panneerselvam, Stelios Sotiriadis, Nik Bessis, Nick Antonopoulos

12:30-14:00 Lunch Break**14:00-15:30 Parallel Sessions****EIDWT-S5: Mobile Networks - Room EIDWT 1****Chair: Ciprian Dobre, University Politehnica Bucharest, Romania**

1. Investigation of TCP Traffic in a Vehicular Ad-hoc Network Considering DYMO Routing Protocol
Evjola Spaho, Makoto Ikeda, Leonard Barolli, Vladi Kolici, Fatos Xhafa, Muhammad Younas
2. A Transportation Control System for Urban Environments
Catalin Fratila, Ciprian Dobre, Florin Pop, Valentin Cristea
3. A Reliable and QoS Aware Multi-path Routing Algorithm in WSNs
Elham Sharififar, Mahsa Khosronejad, Mohammad Reza Mazaheri, Behzad Homayounfar, Reza Sheybani
4. Exploring Predictability in Mobile Interaction
Radu-Corneliu Marin, Ciprian Dobre, Fatos Xhafa

W-DINST-S2: System Developments - Room EIDWT 2**Chair: Kenzi Watanabe, Saga University, Japan**

1. Development of a Field Work Type Topographical Map Experiential Learning Support System
Takaaki Fukuda, Hisaharu Tanaka, Kenzi Watanabe, Yasuhisa Okazaki
2. Development of Collaborative Tools to Improve Accessibility in Public Spaces
Javier Caadillas, Fatos Xhafa, Santi Caballé
3. Development of Various WebMailers
Kenzi Watanabe

15:30-16:00 Coffee Break

&

16:00-17:30 Parallel Sessions**Poster Session****Chair: Masato Tsuru, Kyushu Institute of Technology, Japan**

1. A Composability Model for Efficient Web Service's Connectivity
Hajar Omrana, Fatima-Zahra Belouadha, Ounsa Roudies
2. Collaborative Systems for Building Automation
Ioan Valentin Sita
3. Towards Programmatic Management of Services from Multiple Clouds
Dana Petcu, Marc E. Frincu, Silviu Panica, Marian Neagul
4. Management of Software Driven Networks - Research Challenges
Alex Galis, Stuart Clayman
5. Opengate on OpenFlow: System Outline
Mitsuhiro Suenaga, Makoto Otani, Hisaharu Tanaka, Kenzi Watanabe
6. End-to-End Header Compression over Software-Defined Networks: A Low Latency Network Architecture
Supalerk Jivorasetkul, Masayoshi Shimamura, Katsuyoshi Iida

7. Rule Based Expert Systems Running over the Cloud
Traian-Lucian Militaru, George Suciu, Gyorgy Todoran, Anisia Florescu, Vlad Poenaru, Laurentiu Nae, Cristian Cernat
8. Secure Provable Data Possession for Object Storage System
Zhefeng Zou, Zhen Wang, Xiaoping Yuan, Peng Liu
9. Comment on Anonymous Multi-receiver Identity-Based Encryption Scheme
Jianhong Zhang, Yuwei Xu
10. How Can Semantic Be Introduced in GIS Mobile Applications: Expectations, Theory and Reality
Laia Descamps-Vila, Jordi Conesa, Antoni Perez-Navarro

19:00-21:00 Banquet Party

Friday, September 21, 2012**08:00 Registration****09:00-10:30 Parallel Sessions****EIDWT-S6: Tools and Systems - Room EIDWT 1****Chair: Stefan Trausan-Matu, University Politehnica Bucharest, Romania**

1. Smartphone-Based Coordination Support for the Austrian Medical First Responder System
Martin Zsifkovits, Shih-Han Cheng, Florian Waldner, Kurt Heidenberger
2. A Tool for Discourse Analysis and Visualization
Costin-Gabriel Chiru, Stefan Trausan-Matu
3. The Influence of Local Descriptors on Content Based Image Retrieval Systems for Building Recognition
Diana Mironica, Ruxandra Constantin, Mariana Mocanu

W-MILES-S1: Migration to Service Provisioning - Room EIDWT 2**Chair: Anca Daniela Ionita, University Politehnica of Bucharest, Romania**

1. Enabling Legacy Engineering Applications for Cloud Computing: Experience with the mOSAIC API and Platform
Vlado Stankovski, Jernej Juzna, Dana Petcu
2. Monitoring Watershed Parameters through Software Services
Mariana Mocanu, Alexandru Craciun
3. Metamodeling for Assigning Specific Roles in the Migration to Service-Oriented Architecture
Anca Daniela Ionita, Stefan Aureliu Radulescu
4. Keeping Functional Legacy Applications on Grid and Cluster Systems
Gherman Ovidiu

10:30-11:00 Coffee Break**11:00-12:30 Single Session****EIDWT-S7: Data Management and Information Retrieval - Room EIDWT 1****Chair: Fatos Xhafa, Technical University of Catalonia, Spain**

1. Prevention Assistant–Risk Evaluation Based on Sparse Data
Victor Rentea, Margareta Rentea, Mihai Isaroiu, Nita Bogdan, Radu Ioanitescu
2. On the Potential Integration of an Ontology-Based Data Access Approach in NoSQL Stores
Olivier Curé, Fadhela Kerdjoudj, David Faye, Chan Le_Duc, Myriam Lamolle
3. Feature Selection in the Corrected KDD-dataset
Shahrzad Zargari, Dave Voorhis
4. Mining Navigation Patterns in a Virtual Campus
Fatos Xhafa, Antonio Lopez Martinez, Santi Caballé, Vladi Kolici, Leonard Barolli

W-SEDIS-S1: Services for Large Scale Distributed Systems - Room EIDWT 2**Chair: Stelios Sotiriadis, University of Derby, UK**

1. Specification and Validation of a Real-Time Simple Parallel Kernel for Dependable Distributed Systems
Octavian Ganea, Florin Pop, Ciprian Dobre, Valentin Cristea
2. Advanced Service Management and Visualization for Multiple-Cloud Environments
Elena Apostol, Alexandru Gorunescu, Valentin Cristea
3. MongoDB vs Oracle–Database Comparison
Alexandru Boicea, Florin Radulescu, Laura Ioana Agapin
4. The EU-Services Directive: An E-framework to Optimize Public Administration
Vlad Ciobanu, Decebal Popescu, Ciprian Dobre, Florin Pop, Valentin Cristea

12:30-14:00 Lunch Break

INCoS-2012 and EIDWT-2012 Conference Venue

Conference Location

INCOS-2012 and EIDWT-2012 International Conferences will be held at the Faculty of Automatic Control and Computers <http://www.acs.pub.ro>, University Politehnica of Bucharest <http://www.upb.ro>, **313 Spl. Independentei, 060042 Bucharest, Romania** (see Fig. 1). The formal Opening Ceremony will be organized in the INCoS-1 room. Additional information and conferences schedule will be available on registration desk. Please check the Conferences' websites for more details.

- You can use the map at Google Map link to locate it.
- Map with the different places for the conference: [Map Link](#)

Access To Conference Site

The Conferences site can be accessed by the following means of transportation:

By underground - The Conference site is at 5 minutes walk from POLITEHNICA underground station.

By bus - Nos. 136, 236, 336 (UPB Stop).

By trolley bus - Nos. 61, 62 (UPB Stop).

By car - There are free and ample parking facilities in the immediate vicinity of the Conferences site. The entrance in the UPB Campus is not free. The pay tax is 6 lei (around 1,5 Euros).

A. **Facultatea de Automatica si
Calculatoare**
Bucharest, Romania

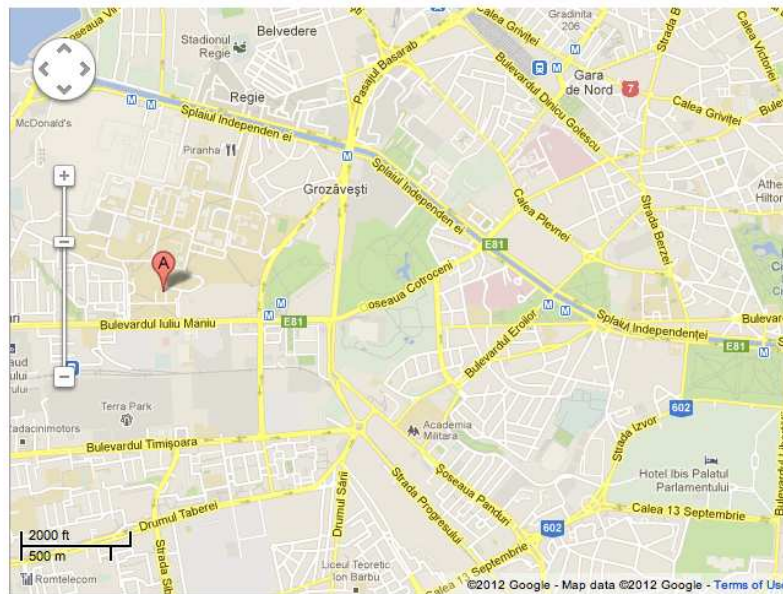


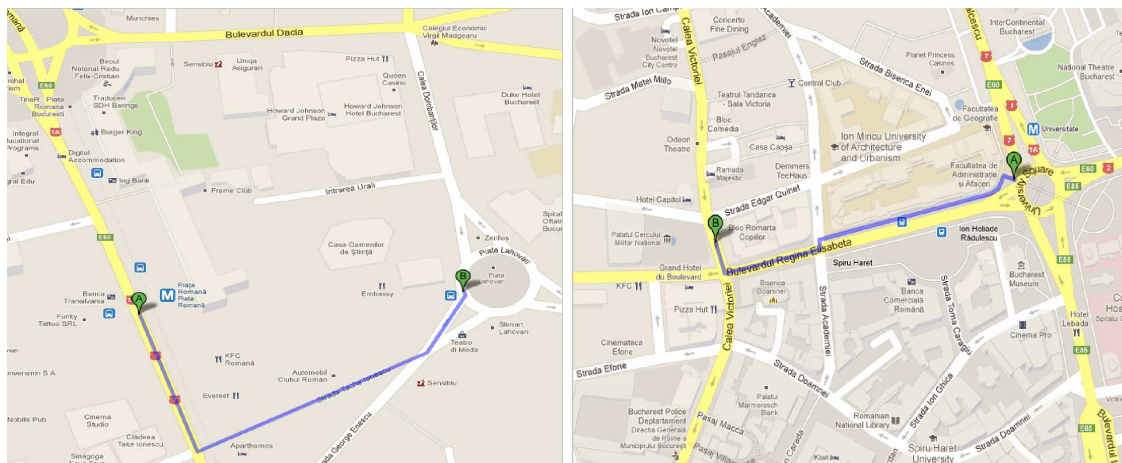
Figure 1: Map of the city showing the location of the conference venue.

Refreshments and Lunches

Refreshments will be available at the Conference site daily during the coffee breaks. Self-lunches will be available for all registered participants on Conference site.

Welcome Party and Banquet Party

The Welcome Party will be on September 19th at Casa Oamenilor de Stiinta
Address: Piata Lahovari, Nr. 9, Sector 1, Bucuresti (location B in Fig. 2(a)).
Directions from the “Piata Romana” subway station (location A in Fig. 2(a)).



(a) Welcome Party location

(b) Banquet Party location

The Banquet Party will be on September 20th at Casa Armatei, room Bizantine.
Address: Strada Constantin Mille, Nr 1-3, Sector 1, Bucuresti (location B in Fig. 2(b)).
Directions from the Universitate subway station (location A in Fig. 2(b)).

Climate

The weather in Bucharest is warm in September. Temperatures between 20°C to 30°C are to be expected.

Insurance

The organizers cannot be held liable for accidents to participants or for damage to or loss their personal property, howsoever caused. Participants are advised to make their own insurance arrangements.

Internet Access

The Internet access will be free of charge for all participants. The wireless connection will be available in the conferences rooms and in the conferences main hall. The information about internet access will be available on the registration desk.