Advance Program

FiCloud 2014

The 2nd International Conference on Future Internet of Things and Cloud

Sponsored by
IEEE Computer Society, Technical Committee on the Internet (IEEE-CS TCI)

MobiWIS 2014

The 11th International Conference on Mobile Web Information Systems

In Collaboration with
Lecture Notes in Computer (LNCS) Science, Springer

Co-located Symposia/Workshops:

ICI, BigR&I, MobiApps, AWMA, EMSICC, PMECT, SNAMS

27-29 August 2014
Barcelona, Spain

With Support of
Universitat Politècnica de Catalunya, Spain
University of Bradford, United Kingdom
Oxford Brookes University, United Kingdom

KEYNOTE TALK

CLOUDS: A Large Virtualisation of Small Things

Prof. Keith G Jeffery, Keith G Jeffery Consultants, Faringdon, UK

Abstract: CLOUD computing is - according to the Gartner Hype Cycle - some years away for general acceptance and utilisation. The CLOUDs Expert Group of the European Commission has been working over several years analysing the evolving market and technologies and planning a roadmap with appropriate research topics. However, European large industry wishes to make small incremental steps whereas the academics - and SMEs - wish to make bold steps to 'leapfrog' the competition. A list of key research and development topics has been produced.
The virtualisation offered by CLOUD computing provides a large opportunity - and a commensurate challenge- for the IoT. Virtualisation implies that the end-user neither knows nor cares how their computing (including data gathering from detectors, data management, analysis, modelling, visualisation) is done provided that the service levels and quality are maintained. The appearance to the end-user is of limitless, scalable, green computing. The IoT is characterised by limited capacities, compromises, hands-on programming and management and sometimes hostile environments. CLOUDs and the IoT are united by some key challenges:energy management and green computing, reliability and sustainability, autonomicity (including intelligent interaction of software components), performance (especially over networks), management of data (new kinds, new styles of management, distributed / fragmented) and trust, security, privacy. The solution to these challenges appears to lie in new systems development methods, new programming languages and techniques, new ways of managing data distribution (including streaming) especially in a networked environment and new ways of engaging the end-user through multilingual, multimodal intelligent interfaces. Meeting these challenges and taking advantage of utilising CLOUDs and IoT together is a key part of the future of Europe.

Biography: Keith Jeffery - now an independent consultant - was Director IT at STFC Rutherford Appleton Laboratory with 360,000 users, 1100 servers and 140 staff. Keith holds 3 honorary visiting professorships, is a Fellow of the Geological Society of London and the British Computer Society, is a Chartered Engineer and Chartered IT Professional, a member of the Academy of Computing and an

Honorary Fellow of the Irish Computer Society. Keith has been President of ERCIM 2004-2013 (http://www.ercim.eu/) and of euroCRIS 2002-2012 (http://www.eurocris.org/), and serves on international expert groups, conference boards and assessment panels. He has advised government and been delegated to represent UK on international panels. He chaired the EC Expert Groups on GRIDs and on CLOUD Computing. His research passion (since the 1960s) is metadata and its use for virtualisation.

KEYNOTE TALK

Cognitive Cars and Smart Roads - Applications, Challenges and Solutions

Prof. Azzedine Boukerche, University of Ottawa, Canada

Abstract: Future generations of Vehicular Networks and Intelligent Transportation Systems (ITS) will play an important role in providing transport services more effectively and more securely. The next stage in ITS development will be greatly influenced by the integration of distributed systems and architectures, as well as by open and common standards and service-oriented architectures.
This talk will consist in an overview about the major research projects related to the design of "cognitive" cars and smart roads applications, which we are currently investigating at the DIVA Strategic Research Network and PARADISE Research Laboratory, University of Ottawa. Next we shall focus on the main challenges, design issues and discuss some results obtained recently. Finally, if time permits, we will talk about LIVE testbed, a convergence of distributed simulation, wireless multimedia and vehicular sensor technologies we are developing at DIVA and PARADISE Research Laboratory for an urban vehicular grid. This testbed will facilitate and enable us to evaluate and design new protocols and applications for future generations of wireless vehicular and sensor network technologies.

Biography: Azzedine Boukerche is a Full Professor and holds a Canada Research Chair Tier-1 position at the University of Ottawa. He is the Scientific Director of NSERC-DIVA Strategic Research Network and Director of PARADISE Research Laboratory at Ottawa U. Prior to this, he held a faculty position at the University of North Texas, USA. He worked as a Senior Scientist at the Simulation Sciences Division, Metron Corporation located in San Diego. He spent a year at the JPL/NASA-California Institute of Technology where he contributed to a project centered about the specification and verification of the software used to control interplanetary spacecraft operated by JPL/NASA Laboratory.
Dr. Boukerche is a Fellow of the Engineering Institute of Canada, a Fellow of the Canadian Academy of Engineering, a Fellow of the American Association for the Advancement of Science, the recipient of the Ontario Distinguished Researcher Award, the Premier of Ontario Research Excellence Award, the G. S. Glinski Award for Excellence in Research, The IEEE Computer Society Golden Core Award, The IEEE CS- Meritorious Award, the University of Ottawa Award for Excellence in Research. Dr. A. Boukerche serves as an Associate Editor for several IEEE

Transactions and ACM journals, as well as a Steering Committee Chair for several IEEE and ACM international conferences.
His current research interests include vehicular networks, sensor networks, mobile ad hoc networks, mobile and pervasive computing, wireless multimedia, performance evaluation and modeling of large-scale distributed systems, distributed computing, and large-scale distributed interactive simulation. Dr. Boukerche has published several research papers in these areas and he is the recipient of several best research paper awards for his work on vehicular and sensor networking and mobile computing. He is the Editor of three books on mobile computing, wireless ad hoc and sensor networks.

KEYNOTE TALK

Internet of Things, People, and Processes

Prof. Schahram Dustdar, Vienna University of Technology, Austria

Abstract: In this talk I will address one of the most relevant challenges for a decade to come: How to integrate the Internet of Things with people and processes, considering modern Cloud Computing and Elasticity principles. Elasticity is seen as one of the main characteristics of Cloud Computing today. Is elasticity simply scalability on steroids? In this talk I will discuss the main principles of elasticity, present a fresh look at this problem, and examine how to integrate people, software services, and things into one composite system, which can be modeled, programmed, and deployed on a large scale in an elastic way.

Biography: Schahram Dustdar is Full Professor of Computer Science (Informatics) with a focus on Internet Technologies heading the Distributed Systems Group. He is a member of the Academia Europaea: The Academy of Europe, Informatics Section (since 2013), recipient of the ACM Distinguished Scientist award (2009), and the IBM Faculty Award (2012). He is an Associate Editor of IEEE Transactions on Services Computing, ACM Transactions on the Web, and ACM Transactions on Internet Technology and on the editorial board of IEEE Internet Computing. He is the Editor-in-Chief of Computing (an SCI-ranked journal of Springer). More information at http://dsg.tuwien.ac.at/staff/sd.

KEYNOTE TALK

Easy Programming the Cloud with PyCOMPSs

Dr. Rosa M. Badia, Barcelona Supercomputing Center, Spain

Abstract: StarSs is a family of task-based programming models which is based on the idea of writing sequential code which is executed in parallel at runtime taking into account the data dependences between tasks. COMPSs is an instance of StarSs, which intends to simplify the execution of Java applications in distributed infrastructures, including clusters and Clouds. For that purpose, COMPSs provides both a straightforward Java-based programming model and a componentised runtime that is able to interact with a wide variety of distributed computing middleware (e.g. gLite, Globus) and Cloud APIs (e.g. OpenStack, OpenNebula, Amazon EC2). The tasks in a COMPSs application can be a regular method or a invokation to a web service, feature that makes it very interesting for IoT if real time as well as support to sensing is added.

The talk will focus in the recent extensions to COMPSs: PyCOMPSs, a binding for the Python language which will enable a larger number of scientific applications in fields such as lifesciences and in the integration of COMPSs with new Big Data resource management methodologies developed at BSC, such as the Wasabi self-containent objects library and Cassandra data management policies. These activities are performed under the flagship project Human Brain Project and the Spanish BSC Severo Ochoa project.

Biography: Bio: Rosa M. Badia holds a PhD on Computer Science (1994) from the Technical University of Catalonia (UPC). She is a Scientific Researcher from the Consejo Superior de Investigaciones Científicas (CSIC) and team leader of the Grid Computing and Cluster research group at the Barcelona Supercomputing Center (BSC). She was involved in teaching and research activities at the UPC from 1989 to 2008, where she was an Associated Professor since year 1997. From 1999 to 2005 she was involved in research and development activities at the European Center of Parallelism of Barcelona (CEPBA). Her current research interest are programming models for complex platforms (from multicore, GPUs to Grid/Cloud). The group lead by Dr. Badia has been developing StarSs programming model for more than 10 years, with a high success in adoption by

application developers. Currently the group focuses its efforts in two instances of StarSs: OmpSs for heterogenoeus platforms and COMPSs for distributed computing (i.e. Cloud). Dr Badia has published more than 120 papers in international conferences and journals in the topics of her research. She has participated in several European projects, for example BEinGRID, Brein, CoreGRID, OGF-Europe, SIENA, TEXT and VENUS-C, and currently she is participating in the project Severo Ochoa (at Spanish level), TERAFLUX, ASCETIC, The Human Brain Project, EU-Brazil CloudConnect, and TransPlant and is a member of HiPEAC2 NoE.

KEYNOTE IV

Mobile Cloud

Prof. Fun Hu, University of Bradford, UK

Abstract: Mobile Cloud Networks (MCN) integrate cloud computing and mobile networks technologies to enable resource-constraint mobile devices utilize varied cloud-based resources. It is expected that MCN will play an important role in the next generation mobile communication networks and cloud computing development in the decade to come. In parallel, C-RAN (Centralised /Cooperative/ Cloud/ Clean RAN) is seen as a key part in the development of 5G mobile communications networks. This talk will present an overview on MCN and C-RAN developments, their architectural and network infrastructure principles, as well as the research challenges that need to be addressed. Finally, the talk will cover some of our work in relation to call admission control in C-RAN that we have carried out so far.

Biography: Fun Hu has been Professor of Wireless Communications Engineering since 2005 and was awarded the Yorkshire Forward Chair in Wireless Communications in 2007 by the then regional development agency. She has over 20 years of experience in mobile, wireless and satellite communications through participations and contributions to various EU, ESA and UK research council funded projects. She was one of the two UK national delegates to various EU COST (Co-Operation in Science and Technology) Actions including COST 279, COST253 and COST 256. She was an executive member in the IEE Electronics and Communications Divisions Professional Network Group on Satellite Systems and Applications between 2000 and 2002 and a member of the Technical Advisory Board in the same group between 2002 and 2008. Her research interests encompass aeronautical communications, mobile/wireless/satellite networking, protocol design, security, QoS and mobility management, radio resource management, wireless sensor networks, RFID, Middleware, the Internet of Thing and Embedded Systems.

WEDNESDAY 27 AUGUST 2014

08:00 am Registration

9:00-9:30 Conference Opening

09:30-10:30 Plenary Session: Keynote I

CLOUDS: A Large Virtualisation of Small Things
Prof. Keith G Jeffery

10:30-11:00 Coffee Break

11:00-12:30 Parallel Sessions

FiCloud Session 1A: IoT and Cloud Computing

Cielo: An Evolutionary Game Theoretic Framework for Virtual Machine Placement in Clouds
Yi Ren, Junichi Suzuki, Athanasios Vasilakos, Shingo Omura, and Katsuya Oba

Online Traffic Prediction in the Cloud: A Dynamic Window Approach
Bruno L. Dalmazo, João P. Vilela, and Marilia Curado

Dynamic media stream mobility with TURN
Alvaro Alonso, Pedro Rodriguez Perez, Joaquín Salvachúa Rodríguez and Javier Cerviño

On the Integration of Cloud Computing and Internet of Things
Alessio Botta, Walter de Donato, Valerio Persico, and Antonio Pescapè

FiCloud Session 1B: Network Design and Architecture

Call Admission Control in Cloud Radio Access Networks
Tshiamo Sigwele, Prashant Pillai and Yim Fun Hu

RPR over Ethernet
Ammar Hamad and Michel Kadoch

Distortion in Social Networks: Comparison of Various Types of Networks
Ofir Ben-Assuli and Arie Jacobi

Video Streaming Considerations for Internet of Things
Rubem Pereira and Ella Pereira

MobiWIS Session 1: Mobile Services and Energy-aware Applications

Online Change Detection for Energy-Efficient Mobile Crowdsensing
Viet-Duc Le, Hans Scholten and P.J.M Havinga

A Hybrid Approach to Web Service Composition Problem in the PlanICS Framework
Artur Niewiadomski, Wojciech Penczek and Jaroslaw Skaruz.

Analysis of Offloading as an Approach for Energy-Aware Applications on Android OS: A Case Study on Image Processing
Luis Corral, Anton B. Georgiev, Alberto Sillitti, Giancarlo Succi, and Tihomir Vachkov

Optimizing QoS-based Web Services Composition by Using Quantum Inspired Cuckoo Search Algorithm
Serial Rayene Boussalia and Allaoua Chaoui

12:30-14:00	Lunch

14.00-15:00	Plenary Session: Keynote II

Cognitive Cars and Smart Roads - Applications, Challenges and Solutions
Prof. Azzedine Boukerche

15:00-15:30	Coffee Break

15:30-17:00	Parallel Sessions

FiCloud Session 2A: Software Architecture and Middleware

An On-Demand WebRTC and IoT Device Tunneling Service for Hospitals
Thomas Sandholm, Boris Magnusson and Björn A. Johnsson

dOTM: A Mechanism for Distributing Centralized Multi-Party Video Conferencing in the Cloud
Pedro Rodríguez, Álvaro Alonso, Joaquín Salvachúa and Javier Cerviño

Media Abstraction Framework for the Pervasive Middleware PalCom
Amr Ergawy and Boris Magnusson

DoLen: User-Side Multi-Cloud Application Monitoring
Do Le Quoc, Lenar Yazdanov and Christof Fetzer

FiCloud Session 2B: Mobile Cloud and Network Services

Mobile Cloud Contextual Awareness with the Cloud Personal Assistant
Michael Joseph O'Sullivan and Dan Grigoras

TCP Hole Punching Approach to Address Devices in Mobile Networks
Satish Narayana Srirama and Mohan Liyanage

Courteous Priority Access to the Shared Commercial Radio for Public Safety in LTE Heterogeneous Networks
Chafika Tata and Michel Kadoch

Joint Caching and Routing for Greening Computer Networks with Renewable Energy Sources
Abdallah Khreishah, Issa Khalil, Ammar Gharaibeh, Haythem Bany Salameh and Rafe Alasem

MobiWIS Session 2: Context-aware and Location-aware Services

Towards a Context-Aware Mobile Recommendation Architecture
María Del Carmen Rodríguez-Hernández and Sergio Ilarri

Beyond Responsive Design: Context-dependent Multimodal Augmentation of Web Applications
Giuseppe Ghiani, Marco Manca, Fabio Paternò, and Claudio Porta

Wherever You Go – Triggers of Location Disclosure for Check-in Services
Stephanie Ryschka and Markus Bick

Extending the Interaction Flow Modeling Language (IFML) for Model Driven Development of Mobile Applications Front End
Marco Brambilla, Andrea Mauri and Eric Umuhoza

17:00-19:00 Parallel Sessions

FiCloud Session 3A: IoT and Cloud Data Management

A Mobile Crowdsensing Ecosystem Enabled by a Cloud-based Publish/Subscribe MiddlewareMiddleware
Aleksandar Antonic, Kristijan Rozankovic, Martina Marjanovic, Kresimir Pripuzic and Ivana Podnar Zarko

Comparative Analysis of Adaptive File Replication Algorithms for Cloud Data Storage
Julia Myint and Axel Hunger

Standardized Framework for Integrating Domain-Specific Applications into the IoT
Neela Shrestha, Sylvain Kubler and Kary Främling

Cost Based Approach to Block Placement for Distributed File Systems
Lakshminarayanan Srinivasan and Vasudeva Varma

FiCloud Session 3B: Context Awareness in Cloud and IoT

Empowering End-Users to Develop Context-Aware Mobile Applications using a Web Platform
David Martín, Carlos Lamsfus, Aurkene Alzua-Sorzabal and Emilio Torres-Manzanera

Ontology Model to Support Multi-tenancy in Software as a Service Environment
Taewoo Nam and Keunhyuk Yeom

Scalable Semantic Aware Context Storage
Mário Luís Pinto Antunes, Diogo Nuno Pereira Gomes and Rui Luis Andrade Aguiar

Social Network-Based Framework for Web Services Discovery
Hiba Fallatah, Jamal Bentahar and Ehsan Khosrowshahi Asl

BigR&I Session: Big Data Research and Innovation

Stratified Multi-Ring Distributed Search Model for Big Data
Weiqing Cheng, Geng Yang, Shanshan Zhang and Shaobai Zhang

Information Security Maintenance Issues for Big Security-Related Data
Natalia Miloslavskaya, Mikhail Senatorov, Alexander Tolstoy and Sergey Zapechnikov

Simulation and Big Data: A Way to Discover Unusual Knowledge in Emergency Departments
Eva Bruballa, Manel Taboada, Eduardo Cabrera, Dolores Rexachs and Emilio Luque

From Big Data to Big Projects: a Step-by-step Roadmap
Hajar Mousannif, Hasna Sabah, Yasmina Douiji and Younes Oulad Sayad

MRTree: Functional Testing based on MapReduce´s Execution Behaviour
Jesús Morán Barbón, Claudio de la Riva Álvarez, and Pablo Javier Tuya González

A Big Data Financial Information Management Architecture for Global Banking
Antoni Munar, Esteban Chiner and Ignacio Sales

Big Data Issues in Computational Chemistry
Violeta Yeguas and Rubén Casado

20:00-22:00	Reception Party

THURSDAY 28 AUGUST 2014

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

Internet of Things, People, and Processes
Prof. Schahram Dustdar

10:00-10:30 Coffee Break

10:30-12:30 Parallel Sessions

FiCloud Session 4A: Security and Privacy

Improving Detection Accuracy in Group Testing-Based Identification of Misbehaving Data Sources
Mai Ali, Sherif Khattab and Reem Bahgat

Towards Continuous Cloud Service Assurance for Critical Infrastructure IT
Aleksandar Hudic, Thomas Hecht, Markus Tauber, Andreas Mauthe and Santiago Cáceres Elvira

On the Risk Exposure of Smart Home Automation Systems
Andreas Jacobsson, Martin Boldt and Bengt Carlsson

User-driven Privacy Enforcement for Cloud-based Services in the Internet of Things
Martin Henze, Lars Hermerschmidt, Daniel Kerpen, Roger Häußling, Bernhard Rumpe and Klaus Wehrle

E-Commerce Security Issues
Mohamad Ibrahim Ladan

FiCloud Session 4B: Performance Evaluation and Modelling

Low Cost Quality Aware Multi-tier Application Hosting on the Amazon Cloud
Waheed Iqbal, Matthew N. Dailey and David Carrera

On the Impact of Layer-splitting for Cloud-based SVC Streaming
Seonghoon Moon, Chanhyuk Jung, Jong-Seok Lee and Songkuk Kim

Live Migration Impact on Vitrual Datacenter Performance
Mohamed Esam Elsaid and Christoph Meinel

Cloud Technology and Performance Improvement with Intserv over Diffserv For Cloud Computing
Abdullah Sinan Yýldýrým and Tolga Girici

MobiWIS Session 3: Mobile Networks and Mobile Applications

Stochastic Resource Allocation for Uplink Wireless Multi-cell OFDMA Networks
Pablo Adasme, Abdel Lisser and Chen Wang

Improving the Performance and Reliability of Mobile Commerce in Developing Countries
Ibtehal Nafea and Muhammad Younas

A Selective Predictive Subscriber Mobility using the Closest Criterion
Fatma Abdennadher and Maher Ben Jemaa

Software Quality Testing Model for Mobile Application
Zhenyu Liu, Lizhi Cai and Yun Hu

12:30-14:00	Lunch

14.00-15:00	Plenary Session: Keynote IV

Mobile Cloud
Prof. Fun Hu

15:00-15:30	Coffee Break

15:30-17:00	Parallel Sessions

FiCloud Session 5A: Networking and Communication Protocols

Data Dissemination Algorithms for Communicating Materials using Wireless Sensor NetworksNetworks
Kais Mekki, William Derigent, Ahmed Zouinkhi, Eric Rondeau and Mohamed Naceur Abdelkrim

Cascading Permissions Policy Model for Token-Based Access Control in the Web of Things
Mohammad Amir, Prashant Pillai and Yim-Fun Hu

Wireless Sensor Networks and Efficient Localisation
Pinar Kirci, Hakima Chaouchi and Anis Laouiti

Large Scale Environmental Monitoring and Maintaining Sensing Coverage in Sensor Networks
Fuad Bajaber

FiCloud Session 5B: Machine to Machine and IoT

Interconnecting Standard M2M Platforms to Delay Tolerant Networks
Asma Elmangoush, Andreea Corici, Marisa Catalan, Ronald Steinke, Thomas Magedanz and Joaquim Oller

The Moving IoT
Julio Arauz

Enhanced Routing over Sleeping Nodes in 6LoWPAN Network

Hari Kumar Nagabushanam, Karthikeyan Premkumar, Deeksha Behara and Tarun Mohandas

Friendship Based Trust Model to Secure Routing Protocols in Mobile Ad hoc Networks
Antesar M.Shabut, Keshav Dahal and Irfan Awan

MobiWIS Session 4: Industrial and Practical Applications

Towards an Automated Safety Suit for Industrial Service
Markus Aleksy and Thomas Scholl

SmartARM: Smartphone based Activity Recognition and Monitoring System for Heart Failure Patient
Umer Fareed

SARA: Singapore's Automated Responsive Assistant, a multimodal dialogue system for touristic information
Andreea I. Niculescu, Ridong Jiang, Seokhwan Kim, Kheng Hui Yeo, Luis F. D'Haro, Arthur Niswar, and Rafael E. Banchs

mSWB: Towards a Mobile Semantic Web Browser
Tamás Matuszka, Gergő Gombos and Attila Kiss

17:00-19:00 Parallel Sessions

ICI Session: Intercloud and IoT

The Impact of Cyber Security issues on Businesses and Governments - A Framework for Implementing a Cyber Security Plan
Hajar Iguer, Hicham Medromi, Adil Sayouti, Soukaina Elhasnaoui and Sophia Faris

Policy Based Security Middleware as a Service
Mhammed Chraibi, Mehdia Ajana El Khaddar, Hamid Harroud, Abdelilah Maach and Mohammed Elkoutbi

Service Composition Framework for Big Data Service
Taewoo Nam, Kyungsuk Choi, Cheolmin Ok and Keunhyuk Yeom

A Virtual Channel-based Framework for the Integration of Wireless Sensor Networks in the Cloud
Javier Barbarán, Manuel Díaz and Bartolomé Rubio

Virtual private Network over Wireless Mesh Networks
Djedjiga Benzid and Michel Kadoch

Device Description Language: Factorizing the Control of Arbitrary Networked Devices
Philip Nye

Stationary Transformation of Video Traffic in LTE
Suliman Albasheir and Michel Kadoch

PMECT Session: Performance Modeling and Evaluation

Dynamic Arrival Process for TCP Using a Novel Time-dependant Statistical Calculation Approach
Zhenyu Chen, Lin Guan and Peter Bull

Stochastic Modeling and Performance Evaluation of an Event Based System
Nitin Shukla and Mayank Pandey

Scalar: Systematic scalability analysis with the Universal Scalability Law
Thomas Heyman, Davy Preuveneers and Wouter Joosen

Scalability analysis of the OpenAM access control system with the Universal Scalability Law
Thomas Heyman, Davy Preuveneers and Wouter Joosen

Accompanying Component Based Systems Dynamic Reconfiguration with formal modelling and analysis
Hamza Zerguine, Nabila Salmi and Malika Boukala

Maximum Entropy Formalism of Multi Traffic Censored Piority Queue
Taimur Karamat and Tehmina Khan

EMSICC Session: Energy Management for Sustainable IoT and Cloud

Towards an Energy-Efficient Tool for Processing the Big Data
Eric Renault and Selma Boumerdassi

Sustainable Quality of Service for real-time jobs in Autonomous Computing Devices
Maryline Chetto

A Real-Time Feedback Scheduler for Environmental Energy with discrete Voltage/Frequency Modes
Akli Abbas, Emmanuel Grolleau, Driss Mehdi, Malik Loudini and Walid-Khaled Hidouci

Fog Computing and Smart Gateway Based Communication for Cloud of Things
Mohammad Aazam and Eui-Nam Huh

In-transit Data Analysis and Distribution in a Multi-Cloud Environment using CometCloud
Ioan Petri, Javier Diaz-Montes, Mengsong Zou, Omer F. Rana, Tom Beach, Haijiang Li and Yacine Rezgui

To Build or Not to Build? Addressing the Expansion Strategies of Cloud Providers
Mohammad Wardat, Mahmoud Al-Ayyoub, Yaser Jararweh and Abdallah A. Khreishah

20:00-22:00	Dinner Party

FRIDAY 29 AUGUST 2014

09:00-10:30 Parallel Sessions

FiCloud Session 6A: IoT and Cloud: Industrial and Business Applications

Provisioning Software-defined IoT Cloud Systems
Stefan Nastic, Sanjin Sehic, Duc-Hung Le, Hong-Linh Truong and Schahram Dustdar

Software Defined Networking: Redefining the Future of Internet in IoT and Cloud Era
Vishwapathi Rao Tadinada

Cloud computing: Adoption Considerations for Business and Education
Adam Smith, Jagdev Bhogal and Mak Sharma

An Expert Consultant for Cloudifying e-Learning Environments
Shehab Gamalel-Din, Reda Salama and Mashael Al-Sowaiel

MobiWIS Session 5: Mobile Apps and Smart Phones

Defining Relevant Software Quality Characteristics from Publishing Policies of Mobile App Stores
Luis Corral, Alberto Sillitti and Giancarlo Succi

Securing Business Data on Android Smartphones
Mohamed Ali El-Serngawy and Chamseddine Talhi

Simulation of the Best Ranking Algorithms for an App Store
Luisanna Cocco, Katiuscia Mannaro, Giulio Concas, and Michele Marchesi

Evaluating Usability of Cross-platform Smartphone Applications
Gebremariam Mesfin, Gheorghita Ghinea, Dida Midekso and Tor-Morten Grønli

10:30-11:00 Coffee Break

11:00-12:30 Parallel Sessions

MobiApps/AWMA Session 1: Smart Systems

Smart Tablet Monitoring By a Real-time Head Movement and Eye Gestures Recognition System
Hanene Elleuch, Ali Wali and Adel M. Alimi

Improving I/O Performance in Smart TVs
Cheolhee Lee, Taeho Hwang and Youjip Won

SlowDroid: Turning a Smartphone into a Mobile Attack Vector
Enrico Cambiaso, Gianluca Papaleo and Maurizio Aiello

Android Executable Modeling: Beyond Android Programming

Olivier Le Goaer, Franck Barbier, Eric Cariou and Samson Pierre

Smart Walker
Gaby Abou Haidar and Roger Achkar

MobiWIS Session 6: Mobile Commerce and Social Media

Analysis of B2C Mobile Application Characteristics and Quality Factors based on ISO 25010 Quality Model
Ekrem Yildiz, Semih Bilgen, Gul Tokdemir, Nergiz E. Cagiltay and Y. Nasuh Erturan

An Investigation on User Preferences of Mobile Commerce Interface in Saudi Arabia
Lulwah N. AlSuwaidan and Abdulrahman A. Mirza

Exploring Social Influence and Incremental Online Persuasion on Twitter: A Longitudinal Study
Agnis Stibe

A Regional Exploration and Recommendation System based on Georeferenced Images
Chandan Kumar, Sebastian Barton, Wilko Heuten and Susanne Boll

12:30-14:00	Lunch

14:00-15:30	Parallel Sessions

MobiApps/AWMA Session 2: Mobile Applications and Mobile Web

A Framework for Cross-platform Mobile Web Applications Using HTML5
Christos J Bouras, Andreas Papazois and Nikolaos Stasinos

RemindMe: An Enhanced Mobile Location-Based Reminder Application
Ali Mert Ertugrul and Itir Onal

Comparative Analysis of Freemium Policies and Procedure between Major Mobile Platforms
Muhamad Idaham Umar Ong, Imran Edzereiq Kamarudin and Mohamed Ariff Ameedeen

Human-Computer Interaction Patterns within the Mobile Nutrition Landscape: A Review of Literature
Stefan Scerri, Lalit Garg, Christian Scerri and Ramandeep Garg

A Two-Stage Resolution Search-Based Heuristic for the Team Orienteering Problem
Mhand Hifi, Ibrahim Moussa and Toufik Saadi

SNAMS Session 1: Social Networking

Prospects for Detecting Deception on Twitter
Ulrik Franke and Magnus Rosell

Social Recommender System for Predicting the Needs of Students/Instructors: Review and Proposed Framework
Hadeel Alharbi, Ashoka Jayawardena and Paul Kwan

A Cloud-Based Tool for Brand Monitoring in Social Networks
Antonio Tedeschi and Francesco Benedetto

Automatic Lexicon Construction for Arabic Sentiment Analysis
Nawaf Abdulla, Roa'a Majdalawi, Salwa Mohammed, Mahmoud Al-Ayyoub and Mohammed Al-Kabi

Impact of Change in Weekend Days on Social Networking Culture in Saudi Arabia
Basit Shahzad, Esam Alwagait and Sophia Alim

15:30-16:00	Coffee Break

16:00-17:30	Session

SNAMS Session 2: Classification Methods

Rough Set Theory Approaches for Arabic Sentiment Classification
Qasem A. Al-Radaideh and Laila M. Twaiq

Exploiting Social Networks for the Prediction of Social and Civil Unrest: A Cloud based Framework
Elhadj Benkhelifa, Elliott Rowe, Robert Kinmond, Oluwasegun A Adedugbe and Thomas Welsh

Cross-lingual Short-Text Document Classification for Facebook Comments
Mosab Faqeeh, Nawaf Abdulla, Mahmoud Al-Ayyoub, Yaser Jararweh and Muhannad Quwaider

Arabic Sentiment Analysis using Supervised Classification
Rehab M. Duwairi and Islam Qarqaz