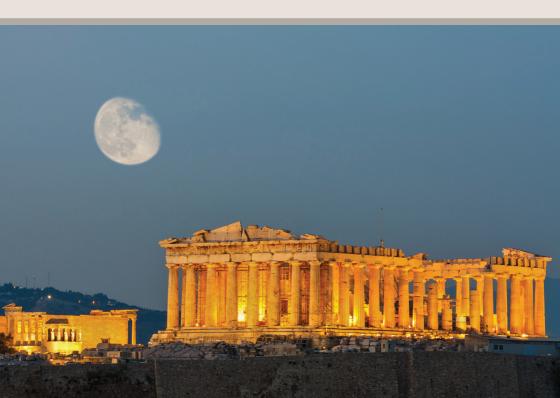# IEEE RCIS 2015

9th International Conference on Research Challenges in Information Science

May 13-15 2015, Athens, Greece

program

Welcome

We are delighted to welcome you to the IEEE 9th International Conference on Research Challenges in Information Science (RCIS). This conference series has become a leading forum for diseminating advances in information science research, development and applications, attracting high-quality original research papers on various topics, such as Information Systems Engineering, including Services, Modeling and Design, and Requirements Engineering, Business Processes, Information Search and Discovery, Data Management and Strategic Management.

The 9th International Conference on Research Challenges in Information Science (RCIS) is sponsored by Harokopio University of Athens, IEEE Greece Section, IEEE Computer Society Greek Chapter and Greek Computer Society.

RCIS 2015 program consists of 17 research paper sessions, 2 doctoral consortium sessions and 4 tutorials. We are honored to feature the following distinguished speakers for their inspiring keynotes:

Prof. Eric Dubois, CRP H. Tudor Luxembourg Institute of Science and Technology
Dr. John Favaro, Software Consultant, Italy
Prof. Bénédicte Le Grand, Université Paris1 Panthéon Sorbonne, France

We are deeply grateful to all who have contributed to this program, particularly the program board and the program committee for their profound contribution. Last but not least, we are grateful to the local organizers for their assistance in organising a successful conference and all attendees for joining us in Athens.

We invite you to explore and enjoy this interesting program and share ideas with other researchers and practitioners to foster new research and innovation in information science and its applications.

Conference General Co-Chairs

Colette Rolland, Université Paris 1 Panthéon-Sorbonne, France
Dimosthenis Anagnostopoulos, Harokopio University of Athens, Greece

Conference Program Co-Chairs

Pericles Loucopoulos, Manchester University, UK
Cesar Gonzalez-Perez, Institute of Heritage Sciences, Spanish National Research Council, Spain

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Jelena Zdravkovic, Stockholm University, Sweden

Proceedings Chair
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Tutorial Chairs
Sergio España, Universitat Politècnica de Valencia, Spain
Dejan Lavbič, University of Ljubljana, Slovenia

Posters and Demos Chairs
Saïd Assar, Mines-Telecom Institute, France
Rim Kaabi, University of Manouba, Tunisia

Doctoral Consortium Chairs
Maya Daneva, University of Twente, The Netherlands
Cherifa Mansoura, Senior Consultant Methodologist/Agile Coach/Business Analyst, Canada
Renata Guizzardi, Universidade Federal do Espirito Santo, Brasil

Web Manager
Wilfried Segretier, University of the French West Indies and Guiana, France

Keynote Speakers

Dr. John Favaro

Software Consultant, Italy

Strategic Research Challenges in the Internet of Things

Abstract

The number of endpoints in the Internet of Things (IoT) is expected to be more than 50 billion by 2020 (feeding a market of nearly $11 billion). The sheer complexity of scale will have an effect not only within well-established areas like security and reliability, but also in the interaction between those areas. Humans in the loop will bring in elements of physiology and psychology, introducing safety relevant considerations within a context of uncertainty and unpredictability, and creating certification nightmares. Heterogeneity will be the norm rather than the exception. Best practices for IoT development are still emerging, and suitable test and validation environments are in their infancy. We will need to address the many research challenges of the Internet of Things in order to exploit the information that will be all around us.

Prof. Bénédicte Le Grand

Université Paris 1 Panthéon Sorbonne, France

How can data (and graph) mining techniques support research in Information Systems?

Abstract

Daily uses of information systems generate large volumes of digital traces: queries on search engines, messages sent on Twitter, purchases on the Internet, new contacts in online social networks Users sometimes leave traces without even noticing!

These digital traces represent an extremely valuable source of information, provided that actual knowledge is extracted from them. In particular, the design and operation of the underlying information systems could be optimized in many ways, e.g., through personalization based on inferred user profiles, context-aware service recommendation, efficient resource allocation, process model extraction, etc.

In this keynote, we will give an overview of data (and graph) mining techniques that can (should!) be used to analyze digital traces generated by information systems. Data mining is widely used in many areas, such as biology, marketing, finance and security; we will study and illustrate its potential to support research in the Information System domain.

Prof. Eric Dubois

Luxembourg Institute of Science and Technology (LIST)

On the role of Architectural models : what can we learnt from Information System and from Construction projects?

Abstract

In construction projects, for many centuries, it is acknowledged the crucial role played by architectural plans as a central document shared by the architects and the different stakeholders. Today these plans are more and more becoming digital and information systems are used for managing associated standardized Building Information Models (BIM).

In information systems projects, the role played by architectures is more recent. From IT architectures, the role of Enterprise Architecture is now more and more emphasized for a better engineering and alignment of the business services and of their supporting information systems.

Despite different approaches, construction projects and IS projects can learn one from each other. In the keynote, we will stress two aspects. On the one hand, for IS projects, like with BIM, we need a standardized way of exchanging information about the different facets of an IS and of their alignment. On the other hand, for construction projects, there is a need for more requirements engineering, a discipline that we are familiar with in the IS domain. Last but not least, with the emergence of the "Building as a service" paradigm, we will suggest the benefit of coupling Building and IS architectures.

Tutorials

The Internet of Things and Cooperative Information Systems

Munindar P. Singh & Amit K. Chopra

Description

This tutorial introduces the Internet of Things (IoT), a rapidly expanding technology area that is shaping up to bring the next revolution in information systems and computing technologies in general. This tutorial explores the key concepts of IoT and describes how ideas from cooperative information systems can support the IoT. It also describes some additional research advances needed in the relevant areas to help realize the IoT.

Short Bio:

Munindar P. Singh is a Professor in Computer Science at North Carolina State University. His research interests include multiagent systems and software engineering with a special emphasis on the engineering of systems consisting of autonomous parties. He coauthored the text Service-Oriented Computing in 2005. Munindar is an IEEE Fellow, the current Editorin- Chief of ACM Transactions on Internet Technology, and a former Editor-in-Chief of IEEE Internet Computing. His current editorial service includes IEEE Internet Computing, IEEE Transactions on Services Computing, Autonomous Agents and Multiagent Systems, and the ACM Transactions on Intelligent Systems and Technology. His prior editorial service includes Journal of Artificial Intelligence Research and Journal of Web Semantics. Munindar was general cochair of AAMAS 2005 and program cochair of CoopIS 1997, ICWS 2008, and several other events. He was a member of the founding IFAAMAS Board of Directors. Munindar has given 20 conference tutorials, including at AAMAS (2002, 2003, 2004), CoopIS (1994), COMAD (1994), ECAI (1996), ICDCS (1995), ICDE (1996), ICMAS (1998) ICSOC (2010), IJCAI (1995, 1997 (two), 1999, 2007), OOPSLA (2004), andWWW (2002, 2004: two each year).
Address: Box 8206. Department of Computer Science, North Carolina State University, Raleigh, NC 27695-8206
Web page: www.csc.ncsu.edu/faculty/mpsingh/

Amit K. Chopra is a Lecturer in Software Engineering at Lancaster University in the UK. His research interests include the software engineering and multiagent systems, with a special emphasis on the modeling of interactions and social expectations. Amit's research has appeared in prestigious venues such as IEEE Transactions on Software Engineering, ACM Transactions on Software Engineering and Methodologies, IEEE Computer, AAMAS, and AAAI. Prior to joining Lancaster University, Amit was a Marie Curie Trentino Cofund Fellow at the University of Trento in Italy. Amit is on the editorial board of the ACM Transactions on Internet Technology.
Address: Infolab21, Room C53, South Drive, Lancaster University, Lancaster LA1 4WA, United Kingdom
Web page: https://sites.google.com/site/akchoprawww/

Meta-modeling: concepts, tools and applications

Saïd Assar

Description:

Models are essential artifacts in software engineering; they provide a compact, easy to understand, and mostly graphical description of a domain or system of interest. The construction of these models must adhere to a permitted structure that itself can be specified as a model— a meta-model. Nowadays, meta-modeling plays a growing role in Information Systems Engineering and is becoming a universal technique to define generic information structures, reference models, and modeling languages. However, for researchers and practitioners engaged in a meta-modeling activity, certain conceptual and operational issues remain vague and the full potential of meta-models not thoroughly understood. The goal of this tutorial is to give attendees a clear picture of the latest research in meta-modeling, to illustrate the variety of application domains and to demonstrate possibilities offered by available meta-CASE technologies along with their limits. Attendees will acquire the knowledge needed to properly envision the role of meta-models in information systems life-cycle and, accordingly, to select the adequate meta-modeling technical infrastructure.

Short Bio:

Saïd Assar holds MSc and PhD degrees in Computer Science from Pierre & Marie Curie University, Paris, France. He is an Associate Professor of Information Systems at Institut Mines-Telecom, Ecole de Management, and is associate researcher at CRI Research Lab, Sorbonne University, Paris. In 2012, he was a visiting scholar at Lund University, Sweden, with the Software Engineering Research Group (SERG). His research interests include IS modeling, method and tools for IS development, empirical software engineering, e-learning and e-government applications. His work has been published in various national and international workshops and conferences, e.g., INFORSID, COMPSAC, ICSOFT and RCIS. He has co-edited three books and took part in organizing many international scientific events, e.g., IFIP WG8.1 EISIC'02, AIM'04, RE'05, pre-ICIS'06, ICIS'08 and RCIS'13. Saïd Assar serves regularly on program committees for national and international workshops and conferences, e.g., IADIS, AIM, INFORSID, RCIS, ECIS, ESEM, and track co-chair at ECIS'13 and ECIS'15. He is on the Editorial Board for Information Technology for Development Journal and Int. Journal of Social and Organizational Dynamics in IT.

More information with complete list of publications is available at: www-public.it-sudparis.eu/~assar/

Specifying Requirements through Interaction Design

Hermann Kaindl

Description:

When the requirements and the interaction design of a system are separated, they will most likely not fit together, and the resulting system will be less than optimal. Even if all the real needs are covered in the requirements and also implemented, errors may be induced by human-computer interaction through a bad interaction design and its resulting user interface. Such a system may even not be used at all. Alternatively, a great user interface of a system with features that are not required will not be very useful as well. This tutorial explains joint modeling of (communicative) interaction design and requirements, through discourse models and ontologies. While these models were originally devised for capturing interaction design, it turned out that they can be also viewed as precisely and comprehensively specifying classes of scenarios, i.e., use cases. In this sense, they can also be utilized for specifying requirements. User interfaces for these software systems can be generated semi-automatically from our discourse models, domain-of-discourse models and specifications of the requirements. This is especially useful when user interfaces tailored for different devices are needed. So, interaction design facilitates requirements engineering to make applications both more useful and usable.

Short Bio:

Professor Hermann Kaindl is the director of the Institute of Computer Technology and a member of the senate at the Vienna University of Technology. He joined this institute in early 2003 as a full professor. Prior to moving to academia, he was a senior consultant with the division of program and systems engineering at Siemens AG Austria. There he has gained more than 24 years of industrial experience in software development and human-computer interaction. He has published five books and more than 170 papers in refereed journals, books and conference proceedings. He is a Senior Member of the IEEE, a Distinguished Scientist member of the ACM, a member of the AAAI, and is on the executive board of the Austrian Society for Artificial Intelligence. He previously gave more than 50 tutorials, e.g., at CAiSE'00, RE'01, RE'02, RE'03, CADUI-IUI'04, RE'04, INCOSE'05, AAAI'06, OOPSLA'06, IFIP Interact'07, OOPSLA'07, RE'08, IFIP Interact'09, ACM EICS'10, AAAI'11, RE'11, ACM CHI'12, BCS HCI'12, ACM SAC'13, IEEE APSEC'13, HICSS'14, ACM SAC'14 and HICSS'15.

Affiliation: Vienna University of Technology, ICT, Gusshausstr. 27-29, A-1040 Vienna, Austria.

Web page: www.ict.tuwien.ac.at/kaindl

Modeling and Analysis of OSS Ecosystems

Xavier Franch, Angelo Susi & Eric S. K. Yu

Description:

Understanding the complex social and organizational context of software systems and organizations is critical to the success of emerging IT technologies. This tutorial focuses on the modeling and analysis of Business and Software ecosystems for the purpose of performing analysis related to their structure in terms of relationships between the different ecosystem components. Beyond a general overview of the topic, the tutorial will take Open Source Software ecosystems as domain, and on one particular activity, namely risk analysis and management, as running example to make the concepts concrete. OSS adoption strategies will be introduced as a way to conduct modeling and analysis. The linkages between ecosystems at the business level and at the technological level will be particularly emphasized.

Short Bio:

Xavier Franch is Associate Professor at UPC, Spain. His research interests are in the areas of requirements engineering, information systems, open-source software, software architecture, and service engineering. He has published >150 refereed papers in journals and international conferences like RCIS, IEEE Software, IEEE TSC, IST, JSS, SPE, CSI, SoSyM, SQJ, IJSEKE, RE, CAiSE, ER, SAC, COMPSAC, ICSR, EASE, ECSA, SEKE, ICCBSS. He won best paper awards in RCIS, ICCBSS and ESELAW. He belongs to the Editorial Board of Elsevier IST, IET Software and IJISMD and to the Steering Committee of RE, CAiSE, REFSQ, CIbSE and the iStar and TwinPeaks workshops. He has played different roles in conferences like RCIS (Doctoral Symposium Co-chair), RE (General Chair, Workshop Co-chair, Publicity Co-chair), FSE (Tutorial Co-chair), ESEM (Doctoral Symposium Co-chair), CAiSE (Program Co-chair, Workshop Co-chair), REFSQ (Program Co-chair, Doctoral Symposium Co-chair), ICCBSS (Program Co-chair, Proceedings Cochair), and belonged to more than 150 program boards and committees in conferences like RCIS, RE, ICSE-NIER, REFSQ, CAiSE, ER, SAC, CBSE, SPLC. He acts as regular reviewer for SCI-indexed journals like TSE, TOSEM, IEEE Software, Computer, REJ, EMSE, IEE Proceedings, FGCS, etc. (up to >20) and edited special issues in ISJ, REJ and IST. He has co-organized several workshops usually organized as satellite events of main conferences in the field as iStar, CMM, CESI, TwinPeaks, RECOTS, MPEC, SOCCER and APLE. He has been keynote speaker at RCIS and MoDRE@RE and taught: tutorials at RCIS, ICSE, RE, CAiSE and CIbSE; seminars at the universities of City London, Wien, Ottawa, Linz, Sevilla, Valencia, NTNU, FBK, Wollongong, Toronto, Groningen, UFES; invited talks at RE, IFIP WG 2.9 and Dagstuhl. He is coordinator of the FP7 STREP project RISCOSS and scientific manager of the H2020 project SUPERSEDE (starting May 2015).
Dept. of Services and Information Systems Engineering, Universitat Politècnica de Catalunya (BarcelonaTech), Barcelona, Spain
Web page: www.essi.upc.edu/~franch/

Angelo Susi is a research scientist in the Software Engineering group at Fondazione Bruno Kessler in Trento, Italy. His research interests are in the areas of requirements engineering, goal-oriented software engineering, formal methods for requirements validation, and search based software engineering. He published more than 80 refereed papers in journals and international conferences such as IST, SoSyM, TOSEM, ER, FSE, ICSE, RE. He participated in the organization committee of several conferences, such as SSBSE '12 (General Chair), RE'11 (Local and Financial chair) and in program committees of international conferences and workshops (such as AAMAS, ICSOC and SSBSE). He also served as reviewer for several Journals such as REJ, IST, JSS. He is the scientific manager of the EU FP7 project RISCOSS. Software Engineering Unit, Fondazione Bruno Kessler, Povo, Italy Web page: https://se.fbk.eu/susi
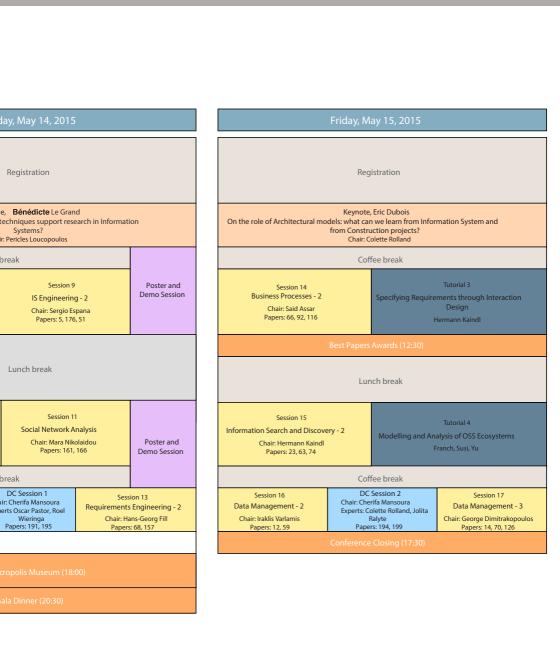
Eric S. K. Yu is Professor at the University of Toronto, Canada.
His research interests are in the areas of information systems modeling and design, requirements engineering, knowledge management, and software engineering. Books he has co-authored or co-edited include: Social Modeling for Requirements Engineering (MIT Press, 2011); Conceptual Modeling: Foundations and Applications (Springer, 2009); and Non-Functional Requirements in Software Engineering (Springer, 2000). He is an associate editor for the Int. Journal of Information Systems Modeling and Design, and serves on the editorial boards of the Int. J. of Agent Oriented Software Engineering, IET Software, and the Journal of Data Semantics. He is co-editor for the MIT Press book series on Information Systems. He was Program Co-chair for the 27th and 33rd Int. Conference on Conceptual Modeling (ER'08, ER'14). Faculty of Information, University of Toronto, Toronto, Canada Web page: yu.ischool.utoronto.ca

Program at a glance

Wednesday, May 13, 2015				Thurs
08:00 - 09:00	Registration			
09:00 - 09:30	Conference opening			
09:30 - 10:30	Keynote, John Favaro Strategic research challenges in the Internet of Things Chair: Cesar Gonzalez-Perez			Keynot How can data (and graph) mining Chair
10:30 - 11:00	Coffee break			Coffee
11:00 - 12:30	Session 1 Business Processes - 1 Chair: Hans Weigand Papers: 88, 44, 60	Session 2 IS Engineering - 1 Chair: Irina Ryschkova Papers: 180, 119, 73, 164	Session 3 Modelling & Design - 1 Chair: Jolita Ralyté Papers: 78, 151, 117	Session 8 Strategic Management Chair: Eric Dubois Papers: 162, 38, 138
12:30 - 14:00	Lunch break			
14:00 - 15:30	Session 4 Information Search and Discovery - 1 Chair: Marko Bajec Papers: 101, 48, 150, 49	Session 5 Requirements Engineering - 1 Chair: Xavier Franch Papers: 64, 82, 37	Tutorial 1 The Internet of Things & Co-operative Information Systems Singh, Chopra	Session 10 Modelling and Design - 3 Chair: Rebecca Deneckere Papers: 83, 21, 106, 25
15:30 - 16:00	Coffee break			Coffee
16:00 - 17:30	Session 6 **Servicification** Chair: Charlotte Hug Papers: 47, 76, 171, 65	Session 7 Modelling and Design - 2 Chair: Bénédicte Le Grand Papers: 155, 108, 122, 58	Tutorial 2 Meta-Modelling: Concepts, Tools and Applications Said Assar	Session 12 Data Management - 1 Chair: John Favaro Papers: 170, 99
	Greek Welcome Reception (19:30)			Visit to A

Registration

e, **Bénédicte** Le Grand
techniques support research in Information
Systems?
ir: Pericles Loucopoulos

break

Session 9	Poster and Demo Session
IS Engineering - 2	
Chair: Sergio Espana Papers: 5, 176, 51	

Lunch break

Session 11	Poster and Demo Session
Social Network Analysis	
Chair: Mara Nikolaidou Papers: 161, 166	

break

DC Session 1	Session 13
air: Cherifa Mansoura erts Oscar Pastor, Roel Wieringa Papers: 191, 195	Requirements Engineering - 2
	Chair: Hans-Georg Fill Papers: 68, 157

cropolis Museum (18:00)

ala Dinner (20:30)

Friday, May 15, 2015

Registration

Keynote, Eric Dubois
On the role of Architectural models: what can we learn from Information System and
from Construction projects?
Chair: Colette Rolland

Coffee break

Session 14	Tutorial 3
Business Processes - 2	Specifying Requirements through Interaction Design
Chair: Said Assar Papers: 66, 92, 116	Hermann Kaindl

Best Papers Awards (12:30)

Lunch break

Session 15	Tutorial 4
Information Search and Discovery - 2	Modelling and Analysis of OSS Ecosystems
Chair: Hermann Kaindl Papers: 23, 63, 74	Franch, Susi, Yu

Coffee break

Session 16	DC Session 2	Session 17
Data Management - 2	Chair: Cherifa Mansoura Experts: Colette Rolland, Jolita Ralyte	Data Management - 3
Chair: Iraklis Varlamis Papers: 12, 59	Papers: 194, 199	Chair: George Dimitrakopoulos Papers: 14, 70, 126

Conference Closing (17:30)

Wednesday, May 13

08:00-09:00	Registration
09:00-09:30	Conference opening
09:30-10:30	**Keynote,** John Favaro "Strategic Research Challenges in the Internet of Things" Chair: Cesar Gonzalez-Perez Amphitheater
10:30-11:00	Coffee break
11:00-12:30	Session **1:** Business Processes - 1 Chair: Hans Weigand Amphitheater

Specifying Business Processes with Azzurra
Fabiano Dalpiaz, Evellin Cardoso, Giulia Canobbio, Paolo Giorgini & John Mylopoulos

Automatic Process Model Discovery from Textual Methodologies: Applied in Archaeology
Elena Viorica Epure, Patricia Martín-Rodilla, Charlotte Hug, Rebecca Deneckère & Camille Salinesi

Collaborative Process Modeling with Tablets and Touch Tables - A Controlled Experiment
Klaus Kammerer, Jens Kolb, Sebastian Ronis & Manfred Reichert

11:00-12:30	Session **2:** IS Engineering - 1 Chair: Irina Ryschkova B1

Measuring sustainability for an effective Information System audit from public organization perspective
Alifah Aida Binti Lope Abdul Rahman, Shareeful Islam & Ameer Al-Nemrat

Supply Chain Integration (SCI) measured from an information sharing perspective: examining its impact on business success
Dimitrios Chatzoudes & Prodromos Chatzoglou

Modelling language quality evaluation in model-driven information systems engineering: a roadmap *(short paper)*
Fáber Danilo Giraldo Velásquez, Sergio España, William Joseph Giraldo Orozco & Oscar Pastor Lopez

Quality-Based Bottom-up Design of Reference Architecture applied to Healthcare Integrated Information Systems *(short paper)*
Francisca Losavio, Oscar Ordaz & Victor Esteller

11:00-12:30	Session **3:** Modelling & Design - 1 Chair: Jolita Ralyté B2

A GUI Modeling Language for Mobile Applications
Sebastian Geiger, Beatriz Marín, Sergio España & Giovanni Giachetti

What do we know about the Defect Types detected in Conceptual Models?
Maria Fernanda Granda, Nelly Condori-Fernandez, Tanja E. J. Vos & Oscar Pastor

Adaptive Software-based Feedback Acquisition: A Personas-based Design
Malik Almaliki, Cornelius Ncube & Raian Ali

12:30-14:00	Lunch break

14:00-15:30	Session **4:** Information Search & Discovery - 1 Chair: Marko Bajec	B1

Semantically Enhanced Information Search: a Fuzzy Ontology-based
Ghada Besbes, Hajer Baazaoui & Henda Ben Ghezela

COnnected Keywords
Grégory Smits, Olivier Pivert & Virginie Thion

A Sequence-based Tree Similarity Search *(short paper)*
Alsayed Algergawy

A Novel Method for Automatic Discovery, Annotation and Interactive Visualization of Prominent Clusters in Mobile Subscriber Datasets *(short paper)*
Shabana K M & Jobin Wilson

14:00-15:30	Session **5:** Requirements Engineering -1 Chair: Xavier Franch	B2

Configuring Crowdsourcing for Requirements Elicitation *(short paper)*
Mahmood Hosseini, Alimohammad Shahri, Keith Phalp, Jacqui Taylor, Fabiano Dalpiaz & Raian Ali

A Goal-based Approach for Automated Specification of Information Quality Policies
Mohamad Gharib & Paolo Giorgini.

Towards a Model of Topic Relevance during Requirements Elicitation - Preliminary Results
Corentin Burnay, Ivan Jureta & Stéphane Faulkner

14:00-15:30	Tutorial **1**	Amphitheater

The Internet of Things and Cooperative Information Systems
Munindar P. Singh & Amit K. Chopra

15:30-16:00	Coffee break

16:00-17:30	Session **6:** Servicification Chair: Charlotte Hug	B1

Accounting for Service Value – an Ontological Approach
Hans Weigand, Paul Johannesson & Maria Bergholtz

A Collaborative Filtering Algorithm with Clustering for Personalized Web Service Selection in Business Processes
Dionisis Margaris, Panagiotis Georgiadis & Costas Vassilakis

Multi-Platform Mobile Application Development Analysis *(short paper)*
Lisandro Delia, Nicolas Galdamez, Pablo Thomas, Leonardo Corbalan & Patricia Pesado

Opinion mining on experience feedback: A case study on smartphones reviews *(short paper)*
Laurent Brisson & Jean-Claude Torrel

| 16:00-17:30 | Session **7:** Modelling and Design - 2
Chair: Bénédicte Le Grand | B2 |

Formal Modeling for Verifying SCA Composition
Lazhar Hamel & Mohamed Graiet

Architecting Process Architectures: Towards a Framework of Design Dimensions *(short paper)*
Alexei Lapouchnian, Eric Yu & Arnon Sturm

Modeling the Multi-Instantiation in a Product Line: the Rexel Case
(short paper)
Raouia Triki, Camille Salinesi & Raul Mazo

Personalization Mobile P2P Network using FCA Based Multidimensional Aggregation
Saloua Zammali, Khedija Arour & Amel Bouzeghoub

| 16:00-17:30 | Tutorial **2** | Amphitheater |

Meta-modeling: concepts, tools and applications
Saïd Assar

| 19:30 | Greek Welcome Reception |

Full papers are allocated 30 minutes for presentation and discussion, while short papers are allocated 15 minutes.

Thursday, May 14

Time	Event	Location
08:00-09:30	Registration	
09:30-10:30	**Keynote,** Bénédicte Le Grand "How can data (and graph) mining techniques support research in Information Systems?" Chair: Pericles Loucopoulos	Amphitheater
10:30-11:00	Coffee break	
10:30-12:30	**Poster** and Demo Session	B3

Traceability and Modeling of Requirements in Enterprise Architecture from a Design Rationale Perspective
Georgios Plataniotis, Sybren de Kinderen, Qin Ma & Henderik Proper

Requirements Elicitation Approaches: A Systematic Review
Aldrin Fredy Jaramillo Franco

Comparing game input modalities: A study for the evaluation of player experience by measuring emotional state and game usability
Stavroula Bampatzia, Eftychia Roumelioti, Angeliki Antoniou, George Lepouras & Varvara Bravou

E-Genomic Framework for delivering genomic services. An application to JABAWS.
David Roldan Martınez, Oscar Pastor Lopez & Jose Fabian Reyes Roman

A theoretical examination of constructs underlying Information Technology Capability
Soerin Bipat & Lineke Sneller

Towards a Reeingeniering of Business Process Management Lifecycle by the Use of Social Networks
Samiha El Hamali & Latifa Mahdaoui

Pragmatic Paradigm: The use of mixed methods in evaluating visualisation
Azira Binti Ab Aziz, Jonathan H. Klein and Melanie J. Ashleigh

Time	Event	Location
11:00-12:30	Session **8:** Strategic Management Chair: Eric Dubois	Amphitheater

Modeling Strategic Business Plans: the Montreux Jazz Festival Case Study
Fabiano Francesconi, John Mylopoulos & Fabiano Dalpiaz

Business Intelligence for Business Intelligence: A case study at STMicroelectronics
Manel Brichni, Sophie Dupuy-Chessa, Lilia Gzara, Nadine Mandran & Corinne Jeannet

Information for decision-making is ubiquitous: revisiting the reverse engineering mode in breadmaking technology
Rallou Thomopoulos, Ahmed Chadli, Madalina Croitoru, Joël Abécassis, Gérard Brochoire & Hubert Chiron

| 11:00-12:30 | **Session 9:** IS Engineering - 2 Chair: Sergio Espana | B1 |

Alignment of ReMMo with RBAC to Manage Access Rights in the Frame of Enterprise Architecture
Christophe Feltus, Eric Dubois & Michael Petit

Method Association Approach: A Situational Method Engineering Approach
Rebecca Deneckere,
Charlotte Hug, Juliette Onderstal & Sjaak Brinkkemper

A Domain-specific Language for Modeling Method Definition: from Requirements to Grammar
Niksa Visic, Hans-Georg Fill, Robert Andrei Buchmann & Dimitris Karagiannis

| 12:30-14:00 | Lunch break |

| 14:00-16:00 | **Poster** and Demo Session | B3 |

Towards Detecting Emotional Communities in Twitter
Andreas Kanavos & Isidoros Perikos

Opinion detection: influence factors
Faiza Belbachir & Bénédicte Le Grand

Taming News Streams with Linked Data
Jon Espen Ingvaldsen & Jon Atle Gulla

Online Knowledge Sharin: Investigating the Antecedents of Frequency and Intensity
Lg Pee

Classifying and Ranking Microblogging Hashtags with News Categories
Shuangyong Song & Yao Meng

Semantic User-centered Search Engine for COTS Components
Nacim Yanes, Sihem Ben Sassi & Henda Ben Ghezela

Music Archipelago, A Facet-like Music Library Comparison Tool
Eric Languénou, Pascale Kuntz & Nicolas Greffard

| 14:00-15:30 | Session **10:** Modelling and Design- 3 Chair: Rebecca Deneckere | Amphitheater |

Comparison of software repositories for their usability in software process reconstruction
Marko Janković & Marko Bajec

Evaluation of BehaviorMap: a User-Centered Behavior Language
Fernando Wanderley, Joao Araujo & António Silva

Revealing intricate properties of communities in the bipartite structure of online social networks *(short paper)*
Tackx Raphaël, Guillaume Jean-Loup & Tarissan Fabien

Automated Refinement of Business Processes through Model Transformations Specifying Business Rules
Roman Popp & Hermann Kaindl

| 14:00-15:30 | Session **11:** Social Network Analysis
Chair: Mara Nikolaidou | B1 |

How do we Spread on Twitter?
Erick Stattner, Reynald Eugenie & Martine Collard

Ranking Educational Videos: The Impact of Social Presence
Dimitrios Kravvaris, Katia Lida Kermanidis & Konstaninos Chorianopoulos

| 15:30-16:00 | Coffee break |

| 16:00-17:30 | Session **12:** Data Management - 1
Chair: John Favaro | Amphitheater |

An Analytical Model for Data Persistence in Business Data Warehouses *(short paper)*
Veit Koeppen, Thorsten Winsemann & Gunter Saake

Diamond multidimentional model and aggregation operators for document OLAP
Maha Azabou, Kais Khrouf & Jamel Feki

| 16:00-17:30 | DC Session **1**
Chair: Cherifa Mansoura
Experts: Oscar Pastor, Roel Wieringa | B1 |

Model-Based Enterprise Information System Design: A SysML-based approach
Anargyros Tsadimas

Studying Social Network Sites via Computational Methods
Tasos Spiliotopoulos

| | Session **13:** Requirements Engineering-2
Chair: Hans-Georg Fill | B2 |

Identifying Reputable Contributors During Requirements Gathering in Collaborative Software Development Platforms
Zeina Azmeh & Isabelle Mirbel

Modeling Analytics as
Knowledge Work: Computing Meets Organizational Psychology
Munindar P. Singh, Guangchao Yuan, Nirav Ajmeri, Pankaj Telang, Chris Allred & Mark Wilson

| 18:00 | Visit to Acropolis Museum |
| 20:30 | Gala Dinner |

Full papers are allocated 30 minutes for presentation and discussion, while short papers are allocated 15 minutes**.**

Friday, May 15

08:00-09:30	Registration
09:30-10:30	**Keynote,** Eric Dubois "On the role of Architectural models: what can we learn from Information System and from Construction projects?" Chair: Colette Rolland Amphitheater
10:30-11:00	Coffee break
11:00-12:30	Session **14:** Business Processes - 2 Chair: Said Assar B1

Modeling Business Processes for Automated Crisis Management Support: Lessons Learned
Elena Kushnareva, Benedicte Le Grand & Irina Rychkova

Adaptation of Collaborative Processes using Versions and Adaptation Patterns
Imen Bensaid, Mohamed Amine Chaabane, Eric Andonoff & Rafik Bouaziz

Business Process Model Extension with Cost Perspective based on Process Mining
Dhafer Thabet, Sonia Ayachi Ghannouchi & Henda Hajjami Ben Ghezala

11:00-12:30	Tutorial **3** Amphitheater

Specifying Requirements through Interaction Design
Hermann Kaindl

12:30	Best Papers Awards Amphitheater
13:00-14:00	Lunch break
14:00-15:30	Session **15:** Information Search and Discovery - 2 Chair: Hermann Kaindl B1

Iterative joint extraction of entities, relationships and coreferences from text sources
Slavko Žitnik & Marko Bajec

Recommendations on Adapting Crowdsourcing to Problem Type
Mahmood Hosseini, Alimohammad Shahri, Keith Phalp & Raian Ali

Concise representation of hypergraph minimal transversals : approach and application on the dependency inference problem
M. Nidhal Jelassi, Christine Largeron & Sadok Ben Yahia

14:00-15:30	Tutorial **4** Amphitheater

Modelling and Analysis of OSS Ecosystems
Xavier Franch, Angelo Susi & Eric S. K. Yu

15:30-16:00	Coffee break

16:00-17:30	**Session 16:** Data Management - 2 Chair: Iraklis Varlamis Amphitheater

Document Similarity Analysis using N-grams and Singular Value Decomposition
Ashraf Hussein

Using Collaborative Filtering to Enhance Domain-Independent CBR Recommender's Personalization
Jihane Karim, Raja Chiky, Matthieu Manceny & Marie-Aude Aufaure

16:00-17:30	**DC Session 2** Chair: Cherifa Mansoura Experts: Colette Rolland, Jolita Ralyte B1

Enabling System Models Automated Evaluation through Cross-Concept Information Utilization
George-Dimitrios Kapos

A Goal-Oriented Approach For Dynamic Execution of Services based on Aspect-Oriented Programming
Omnia Saidani Neffati

16:00-17:30	**Session 17:** Data Management - 3 Chair: George Dimitrakopoulos B2

Holistic Statistical Open Data Integration Based On Integer Linear Programming
Alain Berro, Imen Megdiche & Olivier Teste

Benchmark for OLAP on NoSQL Technologies, Comparing NoSQL Multidimensional Data Warehousing Solutions
Max Chevalier, Mohammed El Malki, Arlind Kopliku, Olivier Teste & Ronan Tournier

Competitive intelligence: History, importance, objectives, process and issues *(short paper)*
Dhekra Ben Sassi, Anissa Frini & Wahiba Ben Abdessalem

17:30	Conference Closing

Full papers are allocated 30 minutes for presentation and discussion, while short papers are allocated 15 minutes.

Social Events

Greek Welcome Reception

Wednesday, May 13, 2015, 19:30

The conference reception will be held at "Axinos", a traditional Greek "ouzeri", by the sea at Piraeus. Buses will depart from Harokopio University at 19:00.

Axinos Restaurant
51 Akti Themistokleous Street, Piraeus
www.axinos.gr

Directions
Participants that wish to access Axinos ouzeri on their own using public transportation may take the 040 bus from El.Venizelou where Harokopio University is, and get off at the bus station "ΒΡΥΩΝΗ" (20 stops). Within a 10 min walk you should reach the "ouzeri". If you wish to take a taxi, the ride is about 20-25 min and the cost is 7-10 € depending on the traffic.

Acropolis Museum and Gala Dinner

Thursday, May 14, 2015, 18:00 and 20:30

Conference participants may enjoy the unique experience of an Acropolis Museum Tour with an experienced tourist guide. The tour has a duration of almost 2 hours and will start at 18:00.
Meeting point: Museum Hall after passing the Entrance security gate.

Acropolis Museum
15 Dionysiou Areopagitou Street, Athens
www.theacropolismuseum.gr/en

The Museum entrance is located at the beginning of the pedestrian walkway of Dionysiou Areopagitou Street in the center of Athens. For more information about directions please advise museum's site (http://www.theacropolismuseum.gr/en/content/getting-here)

Buses will depart from Harokopion University to the Acropolis Museum at 17:30.
After the tour, we will be heading to Lycabettus hill where with funiculars will access the "Orizontes" restaurant, having a panoramic view of the city of Athens. The dinner will start at 20:30.

Orizontes Restaurant
Lycabettus: Lycabettus Hill
www.orizonteslycabettus.gr/en

Directions
Participants, skipping Acropolis Museum tour, may either reach Orizontes Restaurant at the top of Lycabettus Hill by taxi or get the funiculars at Aristippou 1 street - Kolonaki. For conference participants caring a dinner ticket the ticket is prepaid. Cars will depart every 10 min from 20:00 until 21:00 for conference participants.