CAiSE'12

24th International Conference on Advanced Information Systems Engineering

INFORMATION SERVICES

Gdańsk, Poland, 25 – 29 June 2012

Conference Guide

www.caise2012.univ.gda.pl

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Welcome to CAiSE'12

Welcome to the 24th International Conference on Advanced Information Systems Engineering in Gdańsk in Poland. The CAiSE series of conferences started in 1989, the same year as the fall of the Berlin Wall. Twenty-three years later, CAiSE has established itself as a leading event in the information systems engineering domain, whereas Poland is part of the European Union with a booming information technology sector. Worlds apart, but from 25 to 29 June 2012 they come together in CAiSE'12.

The theme of CAiSE'12 is *Information Services*. Information services are considered as a new means to deal with the complexity, modularity, and interoperability of the constantly growing information systems. Design and development of information services and information service-driven architectures become key to the success of organizations and their business. Consequently, the service-driven IS domain is becoming a new complex domain, which requires new interdisciplinary approaches and new transdisciplinary ways of thinking.

The CAiSE'12 conference program includes an abundance of research exchanges. Most importantly, the 42 carefully selected research papers organized into 14 theme sessions. Next to that, the program comprises of four mini-tutorials, the CAiSE Forum, an industrial track on Practice-Driven Research on Enterprise Transformation (PRET 2012), a panel and two keynote speeches. This year we will have an impressive series of ten workshops, a Doctoral Consortium and the working conferences Business Process Modeling, Development, and Support (BPMDS 2012), and Exploring Modelling Methods for Systems Analysis and Design (EMMSAD 2012), this year arranged jointly with EuroSymposium 2012. All in all, a great collection of new achievements in science, ready to be presented in the hospitable atmosphere of Poland.

While you are here, we warmly invite you to enjoy your stay in Gdańsk. Gdańsk is a beautiful and lively city with a rich history that will welcome you with the traditional Polish friendliness. You may even take a tour in the country around the Amber Coast at the Baltic Sea.

We hope that your participation in the CAiSE conference will be inspirational for scientific research and a good support for industrial innovation.

Enjoy and be inspired!

Jolita Ralyté, Xavier Franch, Sjaak Brinkkemper, and Stanisław Wrycza

Gdańsk, June 2012

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Keynote Speakers

Keynote Speeches:

- Wednesday, June 27th 9:00-10:30 - Prof. Michele Missikoff - "Looking at Future Research Challenges in Enterprise Information Systems"

- Thursday, June 28th 11:00-12:00 - Dr. Krzysztof Kurowski - "Challenges for future platforms, services and networked applications"

Prof. Michele Missikoff

Michele Missikoff, Doctor in Physics (University of Rome "La Sapienza"), worked until 1980 in industrial research labs of two Italian companies, leader in electronic equipment and software development, respectively. Then he started his research carrier, becoming Director of Research in 2001, at the National Research Council, Institute of Analysis of Systems and Informatics, where he coordinated the Database group until 1985, then the Knowledge Engineering group and, in 1999, he founded the LEKS, Lab for Enterprise Knowledge and Systems, that he currently leads as CNR Research Fellow.

He has been the proposer, coordinator and/or active participant in more than 30 national, European and international projects. Has being particular active in various groups, committees, and task forces, promoted by the European Commission, DG Information Society and Media. Currently, he is the coordinator of the FInES (Future Internet Enterprise Systems) Research Roadmap Task Force, launched by the EC FInES Cluster (Unit D4).

He has promoted, organised, and chaired various international conferences and workshops, among which CAiSE, CoopIS, ODBASE, EDBT (co-founder), VLDB (Industrial Co-chair). He has been editor of VLDB Journal, Journal of Applied Intelligence.

He has a long teaching experience at University of Roma "La Sapienza" and LUISS, with courses on Artificial Intelligence, Databases, Information Systems, Knowledge Management.

He published more than 150 technical and scientific papers, many on international journals and conference proceedings, with the main focus on application of semantic technologies to e-Business and e-Government.

His main research interests are: enterprise ontologies, methods for knowledge representation, ontology engineering, similarity reasoning, business process ontologies, methods and tools for business innovation; and applications in the area of e-tourism, e-government, e-business, and mobile social media.

Dr. Krzysztof Kurowski

Dr Krzysztof Kurowski is the Head of the Applications Department at Poznan Supercomputing and Networking Center. He joined in research and development activities conducted at PSNC in 1999. He received his PhD in Computer Science from Poznan University of Technology in 2009. He has taken an active interest in the following research fields: distributed systems, grids, security, scheduling and resource management in distributed computing environments. He has taken also an active part in multidisciplinary EU projects within 5th, 6th and 7th Framework Programme, e.g. GridLab and inteliGrid. Recently, he has been leading technical R&D activities in two EU projects: QosCosGrid and MAPPER. Results of his research efforts have been successfully presented at many international workshops and conferences, including IFORS, CCGrid, HPDC, ICCS, Terena, Supercomputing and OGF. He is a member of the following standardization bodies: Open Grid Forum, Liberty Alliance, OASIS and ETSI. He was a research visitor in many well-known research institutions, such as University of Queensland/Australia, Argonne National Lab in Chicago/USA, University of Southern California in Los Angeles/ USA, University of Wisconsin in Madison/USA, Cardiff University in Cardiff/Wales, EPCC University of Edinburgh in Edinburgh/Scotland.

CAiSE'12 Chairs

Sjaak Brinkkemper is full professor of organization and information at the Department of Information and Computing Sciences of Utrecht University, The Netherlands. He holds a MSc and a PhD in Mathematics and Computer Science from the University of Nijmegen. He leads a group of about 35 researchers specialized in the methodology of product software development, implementation and alignment, and entrepreneurship in software ecosystems. He has published ten books and many papers on his research interests: software product development, information systems methodology, meta-modelling, and method engineering. He was involved in the organization and program committees of numerous conferences and workshops (CAiSE, ICSOC, ECIS, WITS, OOIS, REFSQ, WICSA, ICSOB), and serves on the steering committee of ECIS, IWSPM, IWSECO, and ICSOB. He is a member of the Editorial Board of the MIS Quarterly, European Journal of Information Systems, and the Journal of Database Management.

Jolita Ralyte is senior researcher and lecturer in the Institute of Services Science at the University of Geneva. She holds a PhD and a MSc in Computer Science from the University of Paris 1 - Sorbonne, France and a MSc in Applied Mathematics from the University of Vilnius, Lithuania. The research areas of Jolita include situational method engineering, methods and tools for engineering information systems and services, information systems evolution and interoperability, requirement engineering, and services science. Currently she is a Vice-Chair of the IFIP WG 8.1 and is leading the Method Engineering Task Group within the IFIP WG 8.1. Jolita has been involved in the organization of many international conferences, she has served as Program Chair of the IFIP WG 8.1 Working Conference ME'07 and General Chair of the IFIP WG 8.1 Working Conference ME'11. Jolita is on the editorial board of the International Journal of Information Systems Modeling and Design and the International Journal of Information Systems in the Service Sector.

Xavier Franch is associate professor for the Universitat Politecnica de Catalunya (UPC). PhD and Msc. in Informatics, UPC. His interests include Information Systems, Requirements Engineering, Software Quality, Software Architecture, Service Oriented Computing and Component-Based Software Engineering (OSS and COTS), among others. He is editorial board member of the Elsevier IST Journal and IJISMD. He has served as Program Chair or General Chair in conferences like RE, REFSQ and ICCBSS.

Stanisław Wrycza is professor and head of Department of Business Informatics at University of Gdansk, Poland. His numerous publications – books, articles, papers - regard business informatics, information systems development, UML, SysML, e-business, e-learning. He is editorial board member of Information Systems Journal, Information Systems Management, Journal of Database Management, Information Systems and E-business Management. Stanislaw has been involved in organization of numerous international conferences, serving as organizing chair of ECIS 2002, BIR 2008 and SIGSAND/PLAIS EuroSymposium 2011 held in Gdansk. He was Vice President of Information Systems Academic Heads International (2008-2010).

CAiSE'12 programme at a glance

Satellite Events*

Monday, June 25th		
Time	**Activity**	**Events** *(Rooms)*
8:30-9:30		*Registration*
9:30-11:00	Session 1	**EMMSAD/EuroSymposium** *(A210)*, **BPMDS** *(A208)*, **BUSITAL** *(A201)*, **WISSE** *(A203)*, **IWSSA** *(A206)*
11:00-11:30		*Coffee break*
11:30-13:00	Session 2	**EMMSAD/EuroSymposium** *(A210)*, **BPMDS** *(A208)*, **BUSITAL** *(A201)*, **WISSE** *(A203)*, **IWSSA** *(A206)*
13:00-14:30		*Lunch*
14:30-16:00	Session 3	**EMMSAD/EuroSymposium** *(A210)*, **BPMDS** *(A208)*, **BUSITAL** *(A201)*, **WISSE** *(A203)*, **IWSSA** *(A206)*
16:00-16:30		*Coffee break*
16:30-17:30	Session 4	**EMMSAD/EuroSymposium** *(A210)*, **BPMDS** *(A208)*, **BUSITAL** *(A201)*, **WISSE** *(A203)*, **IWSSA** *(A206)*
19:30-23:00		**Working Conferences/Workshops Dinner** **Sopot Evening**

Tuesday, June 26th		
Time	**Activity**	**Events** *(Rooms)*
8:30-9:30		*Registration*
9:30-11:00	Session 1	**EMMSAD/EuroSymposium** *(A210)*, **BPMDS** *(A208)*, **GRCIS & HC-PAIS** *(A201)*, **EOMAS & AgilES** *(A202)*, **NGEBIS** *(A203)*, **CSSI** *(A205)*, **ONTOSE** *(A206)*, **DC** *(A207)*
11:00-11:30		*Coffee break*
11:30-13:00	Session 2	**EMMSAD/EuroSymposium** *(A210)*, **BPMDS** *(A208)*, **GRCIS & HC-PAIS** *(A201)*, **EOMAS & AgilES** *(A202)*, **NGEBIS** *(A203)*, **CSSI** *(A205)*, **ONTOSE** *(A206)*, **DC** *(A207)*
13:00-14:30		*Lunch*
14:30-16:00	Session 3	**EMMSAD/EuroSymposium** *(A210)*, **BPMDS** *(A208)*, **GRCIS & HC-PAIS** *(A201)*, **EOMAS & AgilES** *(A202)*, **NGEBIS** *(A203)*, **CSSI** *(A205)*, **ONTOSE** *(A206)*, **DC** *(A207)*
16:00-16:30		*Coffee break*
16:30-18:30	Session 4	**EMMSAD/EuroSymposium** *(A210)*, **BPMDS** *(A208)*, **GRCIS & HC - PAIS** *(A201)*, **EOMAS & AgilES** *(A202)*, **NGEBIS** *(A203)*, **CSSI** *(A205)*, **ONTOSE** *(A206)*, **DC** *(A207)*
19:30-21:00		**Guided Tour in Gdansk Old City**

*The schedules, proposed by the organizers, of the specific satellite events may differ from the general programmes; for details look at the detailed programme of the specific event

Main Conference

	Wednesday, June 27th		
	Room S203	**Room S207**	**Room A201**
8:00-18:00	*Registration*		
9:00-10:30	**<u>Conference Opening</u>** **Keynote 1:** Prof. Michele Missikoff - "Looking at Future Research Challenges in Enterprise Information Systems" *(Room S208)*		
10:30-11:00	*Coffee break*		
11:00-12:30	**Session 1:** Business Process Model Analysis	**Session 2:** Service and Component Composition	**PRET Session 1**
12:30-14:00	*Lunch*		
14:00-15:30	**Session 3:** Languages and Models	**Session 4:** System Variants and Configuration	**PRET Session 2**
15:30-16:00	*Coffee break*		
16:00-18:00	**Session 5:** Process Mining	**Session 6:** Ontologies	**PRET Session 3**
19:00-21:00	**Welcome Reception at Oliwa Park**		

	Thursday, June 28th		
	Room S203	**Room S207**	**Room A210**
8:30-18:00	*Registration*		
9:00-10:30	**Session 7:** Requirements and Goal Models	**Session 8:** Compliance	**Tutorial 1:** Designing technical action research and generalizing from real-world cases
10:30-11:00	*Coffee break*		
11:00-12:00	**Keynote 2:** Dr. Krzysztof Kurowski - "Challenges for Future Platforms, Services and Networked Applications" *(Room S208)*		
12:00-13:30	*Lunch +* **CAiSE Forum**		
13:30-15:00	**CAiSE Forum**		
15:00-16:00	**Session 9**: Monitoring and Prediction	**Session 10**: Services	**Tutorial 2 (14:30-16:00):** Full model-driven practice: from requirements to code generation
16:00-16:30	*Coffee break*		
16:30-18:00	**Panel** *(Room S208)*		
19:30-23:00	**Conference Gala Dinner in Hilton Hotel**		

	Friday, June 29th		
	Room S203	**Room S207**	**Room A210**
8:30-12:00	*Registration*		
9:00-10:30	**Session 11**: Case Studies	**Session 12**: Business Process Design	**Tutorial 3**: Improvisational Theater for Information Systems: an Agile, Experience-Based, Prototyping Technique
10:30-11:00	*Coffee break*		
11:00-12:30	**Session 13**: Feature Models and Product Lines	**Session 14**: Human Factors	**Tutorial 4**: Ontological Foundations for Conceptual Modeling with Applications
12:30-13:00	**Closing Session: Announcement of CAiSE 2013 Valencia** *(Room S208)*		
13:00-14:00	*Lunch*		

CAiSE'12 Main Conference in detail

	Wednesday, June 27th		
	Room S203	**Room S207**	**Room A201**
8:00-18:00	*Registration*		
9:00-10:30	**Conference Opening** **Keynote 1:** Prof. Michele Missikoff - "Looking at Future Research Challenges in Enterprise Information Systems" *(Room S208)*		
10:30-11:00	*Coffee break*		
11:00-12:30	**Session 1: Business process model analysis** **Chair: Anne Persson**	**Session 2: Service and Component Composition** **Chair: Jelena Zdravkovic**	**PRET Session 1**
	11:00-11:30	**Understanding Business Process Models: The Costs and Benefits of Structuredness** M. Dumas, M. La Rosa, J. Mendling, R. Mäesalu, H.A. Reijers, N. Semenenko	11:00-11:30	**Towards Conflict-free Composition of Non-orthogonal, Non-functional Behavior** B. Schmeling, A. Charfi, M. Martin, M. Mezini	**A clarification of the Application Concept: The Caixa Geral de Depósitos Case.** Pedro Sousa, Rui Martins, André Sampaio,
	11:30-12:00	**Aggregating individual models of decision-making processes** R. Petrusel	11:30-12:00	**Fuzzy Verification of Service Value Networks** I.S. Razo Zapata, P. de Leenheer, J. Gordijn, H. Akkermans	**Organizational Configuration Actor Role Modeling Using DEMO** Carlos Pascoa, David Aveiro, Jose Tribolet
	12:00-12:30	**Generating Natural Language Texts from Business Process Models** H. Leopold, J. Mendling, A. Polyvyanyy	12:00-12:30	**Cooperative Service Composition** N. Mehandjiev, F. Lecue, M. Carpenter, F. Rabhi	
12:30-14:00	*Lunch*		
14:00-15:30	**Session 3: Languages and Models** **Chair: Manfred Jeusfeld**	**Session 4: System Variants and Configuration** **Chair: Giancarlo Guizzardi**	**PRET Session 2**
	14:00-14:30	**Abstracting Modelling Languages: A Reutilization Approach** J. de Lara, E. Guerra, J. Sánchez-Cuadrado	14:00-14:30	**Variability as a Service: Outsourcing Variability Management in Multi-tenant SaaS Applications** A. Ghaddar, D. Tamzalit, A. Assaf, A. Bitar	**A Method for Enterprise Architecture Alignment** Tony Clark, Balbir Barn, Samia Oussena,
	14:30-15:00	**Logical Invalidations of Semantic Annotations** J. Koepke, J. Eder	14:30-15:00	**Configurable Process Models for the Swedish Public Sector** C.M. Lönn, E. Uppström, P. Wohed, G. Juell-Skielse	**A Practice-based Framework for Enterprise Coherence** Roel Wagter, Erik Proper, Dirk Witte
	15:00-15:30	**SOS (Save Our Systems): A uniform programming model for non-relational systems** P. Atzeni, F. Bugiotti, L. Rossi			

		Wednesday, June 27th		
		Room S203	**Room S207**	**Room A201**
	15:00-15:30		**Aligning Software Configuration with Business and IT Context** F. Dalpiaz, P. Giorgini, R. Ali, P. Giorgini	
15:30-16:00		*Coffee break*		
16:00-18:00		**Session 5: Process Mining** **Chair: Barbara Weber**	**Session 6: Ontologies** **Chair: Terry Halpin**	**PRET Session 3** **Measuring Business-IT Alignment and Evaluating Quality of Service for RAD Projects Using the REFINTO Framework and Tool** Emem Umoh, Pedro Sampaio, Babis Theodoulidis **Research methodology for practice-driven research** **Final closing remarks**
	16:00-16:30	**Mining Inter-Organizational Business Process Models from EDI Messages: A Case Study from the Automotive Sector** R. Engel, W.M.P. van der Aalst, M. Zapletal, C., Pichler, H. Werthner	**OtO Matching System: A multi-strategy approach to Instance Matching** E. Daskalaki, D. Plexousakis	
	16:30-17:00	**Data Transformation and Semantic Log Purging for Process Mining** L.T. Ly, C. Indiono, J. Mangler, S. Rinderle-Ma	**SCIMS: A Social Context Information Management System for Socially-Aware Applications** M.A. Kabir, J. Han, J. Yu, A. Colman	
	17:00-17:30	**Improved Artificial Negative Event Generation to Enhance Process Event Logs** S.K.L.M. van den Broucke, J. de Weerdt, B. Baesens, J. Vanthienen	**Ontological Meta-Properties of Derived Object Types** G. Guizzardi	
	17:30-18:00	**Efficient Discovery of Understandable Declarative Process Models from Event Logs** F.M. Maggi, R.P. Jagadeesh Chandra Bose, W.M.P. van der Aalst	**An Automatic Approach for Mapping Product Taxonomies in E-commerce Systems** L.J. Nederstigt, S.S. Aanen, D. Vandic, F. Frasincar	
19:00-21:00		**Welcome Reception at Oliwa Park**		

	Room S203			Room S207			Room A210
Thursday, June 28th						
	Room S203			Room S207			Room A210
8:30-18:00	*Registration*						
9:00-10:30	**Session 7: Requirements and Goal Models** **Chair: Fabiano Dalpiaz**			**Session 8: Compliance** **Chair: Marite Kirikova**			**Tutorial 1: Designing technical action research and generalizing from real-world cases** Roel Wieringa
	09:00-09:30	**Requirements-Driven Root Cause Analysis Using Markov Logic Networks** H. Zawawy, K. Kontogiannis, J. Mylopoulos, S. Mankovskii		09:00-09:30	**On Analyzing Process Compliance in Skin Cancer Treatment: An Experience Report from the Evidence-Based Medical Compliance Cluster (EBMC²)** R. Dunkl, M. Binder, W. Dorda, K.A. Fröschl, W. Gall, W. Grossmann, K. Harmankaya, M. Hronsky, S. Rinderle-Ma, C. Rinner, S. Weber		
	09:30-10:00	**Validation of User Intentions in Process Models** G. Groener, M. Asadi, B. Mohabbati, D. Gasevic, F. Silva Parreiras, M. Boskovic		09:30-10:00	**Compliance Evaluation with Heatmaps** D. Karagiannis, C. Moser, A. Mostashari		
	10:00-11:30	**Agile Requirements Evolution via Paraconsistent Reasoning** N. Ernst, A. Borgida, J. Mylopoulos, I. Jureta		10:00-11:30	**A Compliance Management Ontology: Developing Shared Understanding through Models** N. Syed Abdullah, S. Sadiq, M. Indulska		
10:30-11:00	*Coffee break*						
11:00-12:00	**Keynote 2:** Dr. Krzysztof Kurowski - "Challenges for Future Platforms, Services and Networked Applications" *(Room S208)*						
12:00-13:30	*Lunch* + **CAiSE Forum**						
13:30-15:00	**CAiSE Forum**						
15:00-16:00	**Session 9: Monitoring and Prediction** **Chair: Jan Mendling**			**Session 10: Services** **Chair: John Krogstie**			**Tutorial 2 (14:30-16:00): Full model-driven practice: from requirements to code generation** Oscar Pastor, Sergio Espana
	15:00-15:30	**Patterns to Enable Mass-Customized Business Process Monitoring** M. Comuzzi, S. Angelov, J. Vonk		15:00-15:30	**Towards Proactive Web Service Adaptation** A. Moustafa, M. Zhang		
	15:30-16:00	**Predicting QoS in Scheduled Crowdsourcing** R. Khazankin, D. Schall, S. Dustdar		15:30-16:00	**Clouding Services for Linked Data Exploration** S. Castano, A. Ferrara, S. Montanelli		
16:00-16:30	*Coffee break*						
16:30-18:00	**Panel** **Information Services: Fundamentals, Challenges and Trends** Matthias Jarke, Giancarlo Guizzardi, Erik Proper and Oscar Pastor Moderator: Michel Leonard *(Room S208)*						
19:30-23:00	**Conference Gala Dinner in Hilton Hotel**						

Friday, June 29th			
	Room S203	**Room S207**	**Room A210**
8:30-12:00	*Registration*		
9:00-10:30	**Session 11: Case Studies** **Chair: Oscar Pastor**	**Session 12: Business Process Design** **Chair: Janis Stirna**	**Tutorial 3: Improvisational Theater for Information Systems: an Agile, Experience-Based, Prototyping Technique** Martin Mahaux, Patrick Heymans
	09:00-09:30 — **Business Intelligence Modeling in Action: A Hospital Case Study** D. Barone, T. Topaloglou, J. Mylopoulos	09:00-09:30 — **Business Process Design from Virtual Organization Intentional Models** L.M. Priego-Roche, A. Front, D. Rieu, L.H. Thom, A. Front, D. Rieu, J. Mendling	
	09:30-10:00 — **RadioMarche: Distributed Voice - and Web-interfaced Market Information Systems under Rural Conditions** V. de Boer, P. de Leenheer, A. Bon, N. Baah Gyan, C. van Aart, W. Tuyp, S. Boyera, M. Allen, H. Akkermans, C. Gueret	09:30-10:00 — **Modeling Context-aware and Social Collaboration Processes** V. Liptchinsky, R. Khazankin, H.-L. Truong, S. Dustdar	
	10:00-11:30 — **Publication of Geodetic Documentation Center Resources in Internet** M. Luckner, W. Izdebski	10:00-11:30 — **Process Redesign for Liquidity Planning in Practice: An Empirical Assessment** J. Martin, T. Conte, A. Mazarakis	
10:30-11:00	*Coffee break*		
11:00-12:30	**Session 13: Feature Models and Product Lines** **Chair: Raimundas Matulevicius**	**Session 14: Human Factors** **Chair: Irit Hadar**	**Tutorial 4: Ontological Foundations for Conceptual Modeling with Applications** Giancarlo Guizzardi
	11:00-11:30 — **Building Information System Variants with Tailored Database Schemas Using Features** M. Schäler, G. Saake, M. Rosenmüller, T. Leich	11:00-11:30 — **Purpose Driven Competency Planning for Enterprise Modeling Projects** J. Stirna, A. Persson	
	11:30-12:00 — **Evolutionary Search-based Test Generation for Software Product Line Feature Models** F. Ensan, E. Bagheri, D. Gasevic	11:30-12:00 — **Wiki Refactoring as Mind Maps Reshaping** G. Puente, O. Díaz	
	12:00-12:30 — **Feature Model Differences** M. Acher, P. Heymans, P. Lahire, C. Quinton, P. Collet, P. Merle	12:00-12:30 — **Work Experience in PAIS - Concepts, Measurements and Potentials** S. Kabicher, S. Rinderle-Ma	
12:30-13:00	**Closing Session: Announcement of CAiSE 2013 Valencia** *(Room S208)*		
13:00-14:00	*Lunch*		

EMMSAD/EuroSymposium Program

Exploring Modelling Methods for Systems Analysis and Design

http://www.emmsad.org

Monday, June 25th *(Room A210)*	
8:00-17:00	*Registration*
9:00-10:30	**Session 1 Joint Keynote with BPMDS:** **Modeling and managing business processes in the cloud.** Michael Rosemann
10:30-11:00	*Coffee break*
11:00-12:30	**Session 2 Modeling of Enterprise Architecture:** **Model driven Strategic Awareness: From A Unified Business Strategy Meta-model (UBSMM) to Enterprise Architecture** Constantinos Giannoulis, Jelena Zdravkovic, Michael Petit **On Transforming DEMO models to ArchiMate** Sybren De Kinderen, Khaled Gaaloul and Erik Proper
12:30-14:00	*Lunch*
14:00-15:30	**Session 3 Modeling Facts and Rules:** **Form-and-Fact Based Modeling** Terry Halpin, Gerald Weber **A framework for relating business constraints to information systems** Andy Carver, Tony Morgan
15:30-16:00	*Coffee break*
16:00-17:30	**Session 4 Business Process Modeling:** **Perspectives to Process Modeling - A Historical and Conceptual Overview** John Krogstie, **On the Dynamic Configuration of Business Process Models** Emanuel Santos, Joao Pimentel, Jaelson Castro, Anthony Finkelstein

Tuesday, June 26th *(Room A210)*	
8:30-17:00	*Registration*
9:00-10:30	**Session 5 Modeling of non-functional requirements:** **A combined process for elicitation and analysis of safety and security requirements** Christian Raspotnig, Peter Karpati, Vikash Katta **Optimizing Monitoring Requirements in Self-Adaptive Systems 10 conf** Raian Ali, Alberto Griggio, Anders Franzen, Fabiano Dalpiaz, Paolo Giorgini
10:30-11:00	*Coffee break*
11:00-12:30	**Session 6 Safety Modeling and Analysis:** **Identifying Safety Hazards: An experimental Comparison of System Diagrams and Textual Use Cases 11 conf** Tor Stalhane, Guttorm Sindre **Towards Tool Support for Design and Safety Analysis of High Consequence Arming Systems Using**

	Matlab 14 conf Daniel Slipper, Wilson Ifill, Gordon Hunter, Roger Green, Richard Johnson, Alistair McEwan
12:30-14:00	*Lunch*
14:00-15:30	**Session 7 Quality of Models and Modeling Languages:** **Towards the reconstruction and evaluation of conceptual model quality discourses – Methodical framework and application in the context of model understandability 16 conf** Peter Fettke, Constantin Houy, Armella-Lucia Vella, Peter Loos **Sem iotic Considerations for the Design of an Agent-Oriented Modelling Language 8 conf** Brian Henderson-Sellers, Graham Low, Cesar Gonzalez-Perez
15:30-16:00	*Coffee break*
16:00-17:30	**Session 8 Supporting the Learning of Conceptual Modeling:** **Technology-enhanced Support for Learning Conceptual Modeling** Gayane Sedrakyan, Monique Snoeck **Panel: Future collaboration between IFIP 8.1 and SIGSAND**
17:30-18:30	**IFIP WG 8.1. Business Meeting**

13

BPMDS Program

Business processes and Business Process Management in the Cloud

http://www.bpmds.org/

Monday, June 25th *(Room A208)*	
8:00-17:00	*Registration*
9:00-10:30	**Session 1 Joint Keynote with EMMSAD:** **Modeling and managing business processes in the cloud** Michael Rosemann
10:30-11:00	*Coffee break*
11:00-12:30	**Session 2 Business process in the cloud:** **Scalable Business Process Enactment in Cloud Environments** Rainer Schmidt **Preparing for the era of cloud computing: Towards a framework for selecting business process support services** Ilia Bider, Erik Perjons **Discussion**
12:30-14:00	*Lunch*
14:00-15:30	**Session 3 Advanced BPM in an organizational context:** **Recombining Process Knowledge Chunks with ReKon** Sandeep Purao, Arvind Karunakaran, Brian Cameron **An Exploratory Study on Collaboratively Conceptualizing Knowledge Intensive Processess** Juliana França, Joanne Netto, Juliana Carvalho, Flavia Santoro, Fernanda Araujo Baiao, Mariano Pimentel **A Proposal for Ownership Representation in the Context of Business Process Models** Fabiana Santos, Julio Cesar Sampaio Do Prado Leite, Claudia Cappelli, Flavia Santoro, Thaís Vasconcelos Batista
15:30-16:00	*Coffee break*
16:00-17:30	**Session 4 BPM and RE:** **Modeling security requirements in service based business processes** Sameh Turki, Farah Bellaaj, Anis Charfi, Rafik Bouaziz **A Conceptual Foundation of Requirements Engineering for Business Process Applications** Sebastian Adam, Norman Riegel, Anne Gross, Oezguer Uenalan, Simon Darting **Discussion**

Tuesday, June 26th (Room A208)	
8:30-17:00	*Registration*
9:00-10:30	**Session 5 Similarity, variations, configuration:** **Local Behavior Similarity** Matthias Kunze, Mathias Weske **Towards customer-individual configurations of business process models** Michael Becker, Stephan Klingner **Identifying and Classifying Variations in Business Processes** Fredrik Milani, Marlon Dumas, Raimundas Matulevičius
10:30-11:00	*Coffee break*
11:00-12:30	**Session 6 Humans and business process models:** **Modeling Styles in Business Process Modeling** Jakob Pinggera, Pnina Soffer, Stefan Zugal, Barbara Weber, Matthias Weidlich, Dirk Fahland, Hajo A. Reijers, Jan Mendling **Expressiveness and Understandability Considerations of Hierarchy in Declarative Business Process Models** Stefan Zugal, Pnina Soffer, Jakob Pinggera, Barbara Weber **Integrating ordinary users into process management: Towards implementing bottom-up, people-centric BPM** Michael Prilla, Alexander Nolte
12:30-14:00	*Lunch*
14:00-15:30	**Session 7 BPM technologies using computational methods:** **Optimized Time Management for Declarative Clinical Workflows** Irene Barba, Andreas Lanz, Barbara Weber, Manfred Reichert, Carmelo Del Valle **MobiQ: Mobile based processes for efficient Customer Flow Management** Mersini Paschou, Evangelos Sakkopoulos, Efrosini Sourla, Athanasios Tsakalidis **Enabling Probabilistic Process Monitoring in Non-Automated Environments** Andreas Rogge-Solti, Mathias Weske
15:30-16:00	*Coffee break*
16:00-17:30	**Closing session** **Raw materials for business processes in cloud** Marite Kirikova, Ilze Buksa, Ludmila Penicina **Discussion**

Doctoral Consortium

Tuesday, 26.06.2012 *(Room A207)*	
8:30-9:30	*Registration*
9:30-11:00	**Session I: Ontology Based Information System Engineering** **Chair: Isabelle Mirbel** **Collective Ontology-based Information Extraction using Probabilistic Graphical Models** Slavko Zitnik **Participatory Quality Management of Ontologies in Enterprise Modelling** Nadejda Alkhaldi **Towards a new generation of security requirements definition methodology using ontologies** Amina Souag
11:00-11:30	*Coffee break*
11:30-13:00	**Session II: Information System Modeling** **Chair: Oscar Pastor** **Towards Automation of Enterprise Architecture Model Maintenance** Matthias Farwick **Software Component Allocation in Distributed Development Settings** Tommi Kramer **Inconsistency Detection and Repair for Heterogeneous Multimodels** Reza Gorgan Mohammadi
13:00-14:30	*Lunch*
14:30-16:00	**Session III - Invited talk** **Chair: Barbara Pernici** **Some Tips on Design Science Research Methodology and its Applications for PhD Students** Oscar Pastor Discussion among participants
16:00-16:30	*Coffee break*
16:30-18:00	**Session IV : Information System Engineering in the health domain** **Chair: Erik Proper** **Development of a decision-support system in the primary care sector** Michiel Meulendijk **Model-based Integration of Clinical Practice Guidelines in Clinical Pathways** Katja Heiden

Workshops

Monday, 25.06.2012

	BUSITAL - BUSinness/IT ALignment and Interoperability *(Room A201)*
8:30-9:30	*Registration*
9:30-11:00	**Session 1 Alignment in IT Services:** **Business Service Integration Using Pattern Composition** Jeewanie Jayasinghe Arachchige and Hans Weigand **Towards Consumer Preference-aware Requirements** Eric-Oluf Svee, Constantinos Giannoulis and Jelena Zdravkovic
11:00-11:30	*Coffee break*
11:30-13:00	**Session 2 Alignment Engineering:** **Extending the REA-DSL by the Planning Layer of the REA Ontology** Dieter Mayrhofer and Christian Huemer **A Value-oriented Approach to Business/IT Alignment -- Towards Formalizing Purpose in System Engineering** João Pombinho, David Aveiro and Jose Tribolet
13:00-14:30	*Lunch*
14:30-16:00	**Session 3 Alignment Maturity models:** **Strategic Alignment Maturity Model (SAMM) in a cascading Balanced Scorecard (BSC) environment: Utilization and Challenges** Suchit Ahuja **Understanding Maturity of Collaborative Network Organizations By Using B-ITa Processes** Faiza Allah Bukhsh, Maya Daneva and Hans Weigand
16:00-16:30	*Coffee break*
16:30-17:30	**Session 4 Short papers:** **Weighted Alignment Measures of Enterprise Architecture Viewpoints** Jacques Simonin, Selmin Nurcan and Julie Gourmelen **Enterprise Coherence in the Dutch Ministry of Social Affairs and Employment** Roel Wagter, Erik Proper and Dirk Witte

IWSSA - International Workshop on System/Software Architectures *(Room A203)*	
8:30-9:30	*Registration*
10:00-11:00	**Session 1:** **Dealing with Requirements and Architecture Co-Evolution** João Pimentel, Emanuel Santos, Jaelson Castro and Anthony Finkelstein **Experience on Building Architecture Level Adaptable Systems** Xu Zhang and Chung-Horng Lung
11:00-11:30	*Coffee break*
11:30-13:00	**Session 2:** **The 4x6 Tiered Architecture Method: An Approach to the Design of Enterprise Solutions** Ethan Hadar, Irit Hadar, Gabriel Silberman and John Harrison **A Layered Architecture Approach for Enterprise Data Warehouse Systems** Thorsten Winsemann, Veit Koeppen and Gunter Saake **Graph-based Pattern Identification from Architecture Change Logs** Aakash Ahmad, Pooyan Jamshidi, Claus Pahl
13:00-14:30	*Lunch*
14:30-16:00	**Session 3:** **Multi-tenancy Multi-target (MT2): A SaaS Architecture for the Cloud** Antonio Rico Ortega, Manuel Noguera, José Luis Garrido, Kawtar Benghazi and Lawrence Chung **An Architecture for Efficient Web Crawling** Inma Hernandez, Carlos R. Rivero, David Ruiz and Rafael Corchuelo **A Reference Architecture to Devise Web Information Extractors** Hassan A. Sleiman and Rafael Corchuelo
16:00-16:30	*Coffee break*
16:30-17:30	**Session 4:** **On the Use of Model Transformations for the Automation of the 4SRS Transition Method** Sofia Azevedo, Ricardo Machado and Rita Suzana Pitangueira Maciel **Model Driven Workflow Development with T-square** Fazle Rabbi and Wendy MacCaull **IWSSA'12 concluding remarks**

WISSE - Workshop on Information Systems Security Engineering *(Room A206)*	
8:30-9:30	*Registration*
9:30-11:00	**Welcome and Keynote**
11:00-11:30	*Coffee break*
11:30-13:00	**Session 1:** **A Meta-model for Legal Compliance and Trustworthiness of Information System** Fatemeh Zarrabi, Michalis Pavlidis, Haralambos Mouratidis, Shareeful Islam, David Preston **A UML Extension for the Model-driven Specification of Audit Rules** Bernhard Hoisl, Mark Strembeck **Towards Definition of Secure Business Processes** Olga Altuhhova, Raimundas Matulevicius, Naved Ahmed

13:00-14:30	*Lunch*
14:30-16:00	**Session 2:** **Applying soft computing technologies for implementing privacy-aware systems** Christos Kalloniatis, Petros Belsis, Evangelia Kavakli, Stefanos Gritzalis **Ontologies for Security Requirements: A Literature Survey and Classification** Amina Souag, Camille Salinesi, Isabelle Wattiau **Presentation of Panel and time for questions**
16:00-16:30	*Coffee break*
16:30-18:00	**Panel and Close of Workshop**

Tuesday, 26.06.2012

CSSI - Case Studies in Service Innovation *(Room A205)*	
8:30-9:30	*Registration*
9:30-9:40	Opening and Welcome
9:30-11:00	**Keynote Presentation** **Disruptive Business Platforms; a technique for using sustainable technical innovation to deliver growth** Sarah Greasley
11:00-11:30	*Coffee break*
11:30-13:00	**Session 1 Case Studies** **Chair: Dr Babis Theodoulidis** Case Study Presentations (15 mins per presentation): **Case Study 1: The Reverse Side of Servitization: An Orthopaedic Case Study** Ivan Velikanov , Mairi Macintyre, Michael McMahon, John Naybour, Sam Arkle, Jannis Angeli **Case Study 2: A Service Revolution In Fasteners: The Story of Two Businesses with the Same Goal But Very Different Strategies** Nick Frank Discussion: cross case learning (15 mins) **Case Study 3: R&D and Innovation Organization within KIBS** Oihana Basilio **Case Study 4: Innovation in KIBS: Lessons from University-Based Business Incubation Center in Taiwan** Mei Hsiu-Ching Ho, Alger Lee and Yee-Man Lai Discussion: cross case learning (15 mins)
13:00-14:00	*Lunch*
14:00-15:30	**Session 2 Case Studies:** **Chair: Dr Yin Leng Tan** Case Study Presentations (15 mins per presentation): **Case Study 5: "Meeting with Bill"- Innovation Process of Establishing Enterprise Culture and Enhancing Service Quality** Chien-Lung Hsu, Jia-jen Ni, Ming-Chien Chiu, Hsi-tzu Chen **Case Study 6: A Global Impact Service Innovation: The Case of Geological Survey Activity** Victor Liger, Florie Bugeaud, Antonio Guillen, Dominique Morin, Paul Pietyra Discussion: cross case learning (15 mins): **Case Study 7: Knowledge Intensive Processes Characteristics and Improvement: A Banking Best Practice**

	Example Vaughan Mitchell **Case Study 8: Opportunities and Challenges in Financial Markets Integration: The MILA Case** David Díaz, Andrés Araya Discussion: cross case learning (15 mins)
15:30-16:00	*Coffee break*
16:00-17:20	**Panel Session: Future Service Innovation** **Chair: Prof Linda Macaulay** Members Sarah Greasley, Mairi Macintyre, Erik Proper, Nick Frank **Panel Topics:** What sources of innovation are likely to come to the fore in the future? What role will Information Systems Engineers play in future service innovation?
17:20-17:30	Closing Remarks

EOMAS'12 - Enterprise & Organizational Modeling and Simulation & AgilES'12 - Agility of Enterprise Systems *(Room A202)*	
8:30-9:00	*Registration*
9:00-10:30	**Session 1 Full papers:** **Chair: Vojtěch Merunka** **EOMAS'12 Opening** **An Empirical Assessment of the effect of the Context-based Process Semantic Annotation on Process Model Discovery** Mturi Elias and Paul Johannesson **Generating Event Logs with Workload-Dependent Speeds from Simulation Models** Joyce Nakatumba, Michael Westergaard, Wil Van Der Aalst
10:30-11:00	*Coffee break*
11:00-12:30	**Session 2 Full papers:** **Chair: Anna Bobkowska** **FSM-Based Object-Oriented Organization Modeling and Simulation** Vojtech Merunka **Enterprise Systems Meet Social BPM** Martin Molhanec **Learning and Modeling Business Processes from Work Practices** Marielba Zacarias, Paula Ventura
12:30-14:00	*Lunch*
14:00-15:00	**Session 3 Full papers:** **Chair: Anna Bobkowska** **The New UML Function-Behaviour-Structure Diagram for Modelling Workflow of Information Systems** Jerzy Niepostyn and Ilona Bluemke **Experimentation in Executable Enterprise Architecture Models** Laura Manzur, John Santa, Mario Sanchez and Jorge Villalobos
15:00-15:20	*Coffee break*
15:20-17:20	**Session 4 Short papers:** **Chair: Martin Molhanec** **Information Systems, Business and Law - Lessons Learnt** Anna Bobkowska

	Towards formal expression of business rules written in Polish Bogumila Hnatkowska and Anna Błasiak **Modelling and Verification of Interorganizational Workflows with Security Constraints: a Petri Nets-based Approach** Oana Otilia Captarencu **Towards Specialization of the Contract-Aware Software Development Process** Anna Derezinska and Przemyslaw Oltarzewski **Branching Processes Theory Application for Cloud Computing Demand Modeling Based on Traffic Prediction** Andrey Koryakovskiy, Victor Romanov and Aleksandra Varfolomeeva **OpenCASE – a Tool for Ontology-Centred Conceptual Modelling** Robert Pergl and Jakub Tůma
17:20-17:40	*Coffee break*
17:40-18:20	**Session 5 AgilES short papers :** **Chair: Xiaocheng Ge** **Agile development and UX design: Towards understanding work cultures to support integration** Jennifer Ferreira **Viewing Enterprise Resource Planning systems as Services** Nicklas Holmberg, Björn Johansson
18:20-18:30	**Joined EOMAS & AGILES Closing**

NGEBIS - Next Generation Enterprise and Innovation Systems *(Room A203)*	
8:30-9:30	*Registration*
9:00-09:50	**Opening and Keynote:** **Virtual Innovation Factory: a Knowledge-centric approach to Virtual Enterprise Innovation** Stefano De Panfilis, Michele M. Missikoff
9:50-11:00	**Session 1 Methods and Tools for Innovation Management:** **Towards an Open and Scientific Approach to Innovation Processes** Claudia Diamantini, Domenico Potena, Emanuele Storti **KPIs to Manage Innovation Processes in VEEs – Initial Thoughts and Results** Benjamin Knoke, Jens Eschenbächer **CIP – Collaborative Management of Innovation Lifecycle in Enterprise IT Organization** (Poster) Ethan Hadar, Amir Jerbi, Irit Hadar
11:00-11:30	*Coffee break*
11:30-13:00	**Session 2 Models and Knowledge for Innovation:** **A Document Centric Approach for User Requirements in BIVEE** Ali Anil Sinaci, Matteo Piersantelli, Cristina Cristalli, Fernando Gigante, Gokce Laleci, Rahmi Volkan Basar **Knowledge-Based Support to Business Innovation** Francesco Taglino, Fabrizio Smith, Maurizio Proietti **A Model Based Approach For Enterprise Innovation Management** Vedran Hrgovcic, Wilfrid Utz
13:00-14:30	*Lunch*
14:30-16:00	**Session 3 The Technological Sphere in Innovation:** **Bottom-up, decentralized approach to innovation strategy** Dariusz Kralewski **The innovative potential and problems of the modern IT projects** Monika Wozniak

	Service Innovation Life Cycle in a Manufacturing Ecosystem Mike Freitag, Ingo Westphal
16:00-16:30	*Coffee break*
16:30-18:00	**Panel:** **Innovating Innovation: from Crowdsourcing to Excellence** Moderator: Stefano De Panfilis

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ONTOSE - Ontology, Models, Conceptualization and Epistemology in Social, Artificial and Natural Systems *(Room A206)*	
8:30-9:30	*Registration*
10:00-11:00	**Invited Talk** **IPAS: an Ontology Based Approach to e-Government Service Selection** Gianluigi Viscusi, Claudio Baldassare
11:00-11:30	*Coffee break*
11:30-13:00	**Session 1 Ontologies based on Time and Events:** **A model for time-awareness** Francesco Fiamberti, Daniela Micucci, Alessandro Morniroli, Francesco Tisato **Toward a Perdurantist Ontology of Contracts** Sergio de Cesare, Guido Geerts **A Proposal of Event Ontology for Crowd Profiling** Fabio Sartori, Lorenza Manenti, Andrea Gorrini, Mizar Luca Federici
13:00-14:30	*Lunch*
14:30-16:00	**Session 2 Ontology Evolution, Mapping and Enrichment:** **Ontology Evolution with Semantic Wikis** Mauro Dragoni, Chiara Ghidini **Using Open Information Extraction and LOD towards Ontology enrichment and alignment** Antonis Koukourikos, Pythagoras Karampiperis, George Vouros, Vangelis Karkaletsis **Modeling the context of scientific information: mapping VIVO and CERIF** Leonardo Lezcano, Brigitte Jörg, Miguel-Angel Sicilia
16:00-16:30	*Coffee break*
16:30-18:00	**Session 3 Ontologies in Economics and Trade:** **An Attempt of the Heuristic Evaluation of Visualization in Searching Economic Information in Topic Maps Based Application for Return on Investment Indicator** Helena Dudycz **An ontology-based, event-driven, architecture for integrating information, processes and services applied to international trade** Sietse Overbeek , Marijn Janssen, Yao-Hua Tan
18:00-18:15	Closing

	GRCIS - Governance, Risk and Compliance in Information Systems & HC-PAIS - Human-Centric Process-Aware Information Systems *(Room A201)*
8:30-9:30	*Registration*
9:30-11:00	**Session 1:** **Opening and Keynote** HC-PAIS and GRCIS
11:00-11:30	*Coffee break*
11:30-13:00	**Session 2:** **Control Automation to reduce Costs of Control** Rob Christiaanse and Joris Hulstijn **Introducing a Mashup-based Approach for Design-Time Compliance Checking in Business Processes** Cristina Cabanillas, Manuel Resinas and Antonio Ruiz-Cortés **Integrity of Supply Chain Visibility: Linking Information to the Physical World** Joris Hulstijn, Sietse Overbeek, Huib Aldewereld and Rob Christiaanse
13:00-14:30	*Lunch*
14:30-16:00	**Session 3:** **Towards Gesture-based Process Modeling on Multi-Touch Devices** Jens Kolb, Benjamin Rudner, Manfred Reichert **Individual Creativity in Designing Business Processes** Kathrin Figl, Barbara Weber **User-centric Abstraction of Workflow Logic Applied to Software Engineering Processes** Gregor, Grambow, Roy Oberhauser, Manfred Reichert
16:00-16:30	*Coffee break*
16:30-18:00	**Session 4:** **Working Session** HC-PAIS and GRCIS

CAiSE'12 FORUM Program

Thursday, June 28th, 12:00-15:00

Risk Identification of Tailorable Context-aware Systems: a Case Study and Lessons Learned

Mohammad Zarifi Eslami, Brahmananda Sapkota, Alireza Zarghami, Eelco Vriezekolk, Marten van Sinderen, Roel Wieringa

Toward a Conceptual Comparison Framework between CBSE and SOSE

Anthony Hock-koon, Mourad Oussalah

Facilitating Business Improvement by Information Systems using Model Transformation and Metrics

Haruhiko Kaiya, Shunsuke Morita, Kenji Kaijiri, Shinpei Hayashi, Motoshi Saeki

Transforming Transaction Models into ArchiMate

Sybren de Kinderen, Khaled Gaaloul, H.A. (Erik) Proper

SDWM: An Enhanced Spatial Data Warehouse Metamodel

Alfredo Cuzzocrea, Robson do Nascimento Fidalgo

Suitability of Active Rules for Model Transformation

Lingzhe Liu, Manfred A. Jeusfeld

A UML-based Rich Service Description Language for Automatic Service Discovery of Heterogeneous Service Partners

Zille Huma, Christian Gerth, Gregor Engels, Oliver Juwig

Towards a Formal Process-driven Framework for Streamlining Patient-centric Care

Wen Yao, Akhil Kumar, Jerome Rolia, Sujoy Basu, Sharad Singhal

Social Forking in Open Source Software: An Empirical Study

Kam Hay Fung, Aybüke Aurum, David Tang

Virtual Worlds as a Model-View Approach to the Communication of Business Processes Models

Hanwen Guo, Ross Brown, Rune Rasmussen

Support for deviation detections in the context of multi-viewpoint-based development processes

Reda Bendraou, Marcos Aurélio Almeida da Silva, Marie-Pierre Gervais, Xavier Blanc

An Aspect-Oriented Approach to Relating Security Requirements and Access Control

Azadeh Alebrahim, Thein Than Tun, Yijun Yu, Maritta Heisel, Bashar Nuseibeh

A Model Transformation from Misuse Cases to Secure Tropos

Naved Ahmed, Raimundas Matulevicius, Haralambos Mouratidis

LiProMo—Literate Process Modeling

Jakob Pinggera, Thomas Porcham, Stefan Zugal, Barbara Weber

Modelling Security Requirements in Socio-Technical Systems with STS-Tool

Elda, Paja, Fabiano Dalpiaz, Mauro Poggianella, Pierluigi Roberti, Paolo Giorgini

On Applying Sonification Methods to Convey Business Process Data

Tobias Hildebrandt, Simone Kriglstein, Stefanie Rinderle-Ma

Enterprise Modelling in Distributed Teams – Lessons Learned from Information Demand Modelling

Magnus Lundqvist, Kurt Sandkuhl, Ulf Seigerroth

VariaMos: a Tool for Product Line Driven Systems Engineering with a Constraint Based Approach

Raul Mazo, Camille Salinesi, Daniel Diaz

ProMetheuS: A Suite for Process Mining Application

Lucantonio Ghionna, Luigi Granata, Gianluigi Greco, Massimo Guarascio

Workflow Partitiontining for Offline Distributed Execution on Mobile Devices

Peter Wakholi, Weiqin Chen

Quality Management Modeling of Business Processes in IS Projects

Michal Kuciapski

AMES: Towards an Agile Method for ERP Selection

Gustaf Juell-Skielse, Anders G. Nilsson, Andreas Nordqvist, Mattias Westergren

Tutorials Abstracts and Speakers

Tutorial 1: *Designing technical action research and generalizing from real-world cases*

Thursday, June 28th 9:00-10:30

Roel Wieringa, *University of Twente, the Netherlands*

A case study is a study of a very small sample of phenomena in the real world, in order to draw lessons about these phenomena in general. In observational case studies, the researcher studies the phenomena without intervening in them. In action research studies, by contrast, the researcher intentionally intervenes in the phenomena in order to learn about the effects of this intervention in the real world. Technical action research (TAR) is a special case of this, in which a design researcher develops an artifact, such as a method, technique or notation, and then applies this artifact to solve a real-world problem in practice, in order to learn how the artifact behaves in the real world. This tutorial gives examples of TAR and discusses the use of this research approach with the audience. We then discuss the role of theory in TAR, and how we can use theory to generalize from a small set of observations in a case study.

Roel Wieringa is Chair of Information Systems at the University of Twente, the Netherlands. His research interests include requirements engineering, conceptual modelling, and research methodology for software engineering and the design sciences. He has written two books, Requirements Engineering: Frameworks for Understanding (Wiley, 1996) and Design Methods for Reactive Systems: Yourdon, Statemate and the UML (Morgan Kaufmann, 2003.

Roel Wieringa has been head of the Computer Science Department of the UT since 2009 and has been scientific director of the School for Information and Knowledge Systems (SIKS, www.siks.nl), that provides advanced education to all Dutch Ph.D. students in information and knowledge systems, from 2006 to 2011. He serves on the editorial board the Requirements Engineering Journal and of the Journal of Software and Systems Modeling and has been a chair or member of numerous conference program committees. Find more information at http://www.cs.utwente.nl/~roelw

Tutorial 2: *Full model-driven practice: from requirements to code generation*

Thursday, June 28th 14:30-16:00

Oscar Pastor, *Universitat Politecnica de Valencia, Spain*
Sergio Espana, *Universitat Politecnica de Valencia, Spain*

This tutorial will show how to cover the whole software development lifecycle a model-driven way: from RE to software-code generation, focusing on the necessary transformations. By successfully integrating business process modelling (BPM), requirements engineering (RE) and object-oriented conceptual modeling, researchers and practitioners can leverage MDD capabilities. As a practical application a specific method and notations are explained, but the ultimate goal is that participants are able to apply this knowledge to their own contexts, to either industrial practice or academic research.

Oscar Pastor is PhD, full professor and director of the Research Center on Software Production Methods (ProS) at the Universitat Politecnica de Valencia (Spain). He was a researcher at HP Labs, Bristol, UK. He has published 200+ research papers in conference proceedings, journals and books, received numerous research grants from public institutions and private industry, and been keynote speaker at several conferences and workshops. Chair of the ER Steering Committee (SC), and member of the SC of conferences such as CAiSE, ICWE, CIbSE and RCIS. His research interests span conceptual modelling, web engineering, RE, information systems and MDD. He created the object-oriented, formal specification language OASIS and the corresponding software production method OO-Method. He led the research and development of the company CARE Technologies (founded in 1996), which has developed a state-of-the-art MDA-compliant conceptual model compiler named Integranova, a tool that produces a final software product starting from a conceptual model that specifies system requirements. He is currently leading a multidisciplinary project bridging the disciplines of information systems and bioinformatics, aimed at developing tools for interpreting and exploiting the Human

Genome information from a conceptual modelling perspective.

Sergio Espana is PhD and full researcher at the Research Center on Software Production Methods, Universitat Politecnica de Valencia (Spain). He has published in top RE and conceptual modelling conferences. He is member of the programme committee of international conferences (e.g. PoEM) and workshops (e.g. ONTOSE, VORTE). His main research interests include information systems, conceptual modelling, RE, interface design, empirical software engineering and model transformations. He is co-author of Communication Analysis, an information systems RE method that can be applied stand-alone or within an MDD framework.

Tutorial 3: *Improvisational Theater for Information Systems: an Agile, Experience-Based, Prototyping Technique*

Friday, June 29th 9:00-10:30

Martin Mahaux, *University of Namur*
Patrick Heymans, *University of Namur*

Through actually playing improvisational theatre games in groups, participants will be given the chance to feel what it takes to innovate in teams, and will experiment with a technique that enables rapid scenario generation, producing real-time creative experience-centered prototypes. It's definitely participative, fun, refreshing, and different from any tutorial you have ever been attending: don't expect to see any slide! While being self-contained, this tutorial complements well with a tutorial previously given at RCIS by the same speakers.

Martin Mahaux is currently doing a PhD thesis at the University of Namur on the topic of collaboration and creativity. He started his career as an IT consultant, where he enjoyed various positions in the IS development life cycle. He is the main developer of the improv based training technique that is the subject of this mini-tutorial. Martin published about it during his free time in IEEE Software and RE conference. He also works on methods for assessing sustainability of socio-technical systems. More on http://info.fundp.ac.be/~mma/wordpress/

Dr. Patrick Heymans is full professor of IS at University of Namur, and visiting researcher at INRIA Lille. He is founding member and co-director of the PReCISE research centre (50 researchers) where he leads the requirements engineering and software product line efforts. He has supervised 9 PhD theses and authored 85 peer-reviewed papers. He is a regular referee for top IS journals and conferences, and associate editor of IEEE TSE. Patrick regularly acts as an advisor and trainer for IT companies.

Tutorial 4: Ontological Foundations for Conceptual Modeling with Applications

Friday, June 29th 11:00-12:30

Giancarlo Guizzardi, *Computer Science Department at the Federal University of Espirito Santo, Brazil*

The main objective of this tutorial is to introduce researchers to the theory and practice of advanced conceptual modeling through the application of a new emerging discipline named Ontology-Driven Conceptual Modeling. In this discipline, theories coming from areas such as Formal Ontology in philosophy, but also Cognitve Science, Philosophical Logics and Linguistics are employed to derive engineering tools (e.g., modeling languages, methodologies, design patterns, model compilers and simulators) for improving the theory and practice of Conceptual Modeling. In particular, here, the expressiveness and relevance of these theories and derived tools are demonstrated through their application to solve some classical and recurrent conceptual modeling problems concerning the well-founded representation of: classification and taxonomic structures, part-whole relations, intrinsic and relational properties, formal and material associations, association specialization, attribute value spaces, roles and events.

Giancarlo Guizzardi obtained a PhD degree (with the highest distinction) from the University of Twente, in The Netherlands with a thesis entitled "Ontological Foundations for Structural Conceptual Models". Since 2003 he has been a Visiting Scientist, Research Collaborator and Associated Researcher at the Laboratory for Applied Ontology (LOA), Institute for Cognitive Science and Technology (ISTC), in Trento, Italy. He is currently an Associate Professor at the Computer Science Department at the Federal University of Espirito Santo, in Vitoria, Brazil, where he co-leads the Ontology and Conceptual Modeling Research Group (NEMO). He was a Program Committee co-chair of the 14th IEEE International Conference on Enterprise Computing (EDOC) and is currently the Program Committee co-chair of the 8th International Conference on Formal Ontology in Information Systems (FOIS). He is an editorial board member of journals such as the Applied Ontology, the Semantic Web Journal, and the International Journal of Information Systems Modeling and Design (IJISMD). He has 15 years of experience with Conceptual Modeling and Ontology Engineering, both in academia and in industrial projects, in areas such as digital journalism and media content management, telecommunications, e-GOV, petroleum and gas, among others. Finally, he is a member of the executive council of the International Association for Ontologies and Applications (IAOA) and a co-chair of the IAOA SIG on Ontology and Conceptual Modeling.

Conference Venue

The 24th International Conference on Advanced Information Systems Engineering (CAiSE'12) will be held in the modern Social Sciences Faculty Building of the Baltic Campus of University of Gdansk (Gdansk, Bazynskiego 4)

54.399011, 18.573255

Public transport

There is a very convenient and well organized public transport between Gdansk and Sopot hotels and CAiSE'12 venue by: Tricity Metropolitan Railway, buses and trams. The single ticket is about 50 cents. The taxi charge for the course from Gdansk and Sopot hotels to CAiSE'12 venue cost about 10 euros.

A taxi rank is located in front of the main entrance to the passenger terminal of the airport and is serviced by CITY PLUS TAXI.

Phone: **585 111 555**

Social Events

Monday, June 25ᵗʰ, 19:30 – 23:00
Working Conferences/Workshops Dinner
Sopot Evening
Hotel Sheraton, Restaurant InAzia
Sopot, Plac Powstańców Warszawy 10

Tuesday, June 26ᵗʰ, 19:30 – 21:30
Guided Tour in Gdansk Old City
Meeting point at Upland Gate (Brama Wyżynna)
Walking tour across Old City streets
Visits to Amber Museum, Town Hall of the Main City and Artus Court
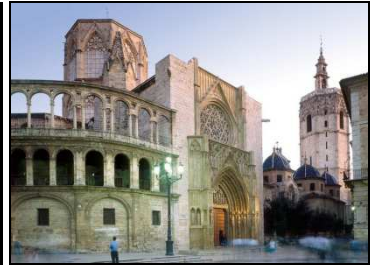
Wednesday, June 27ᵗʰ, 19:00 – 20:30
Welcome Reception at Oliwa Park
in front of Pałac Opatów
Organ concert in Oliwa Cathedral
(A. Guillmant, F. Schubert, J. S. Bach, M-A. Charpentier, L. Boellmann)

Thursday, June 28ᵗʰ, 19:30 – 23:00
CAiSE'12 Gala Dinner
Hilton Hotel
Gdańsk, Targ Rybny 1

CAiSE'13

VALENCIA, SPAIN 25th International Conference on Advanced Information Systems Engineering

PRELIMINARY CALL FOR PAPERS CAiSE'13
25th International Conference on Advanced Information Systems Engineering (CAiSE 2013)
Valencia, Spain, 17 – 21 June 2013

www.pros.upv.es/caise2013

Engineering Information Systems of the Future

2013 will be the 25th birthday of the International Conference CAiSE series. What has changed since the last century, and what does it tell us about future trends in information systems engineering?

Information systems play, more than ever, a strategic role at the very core of organisations. More than ever, emerging innovative platforms, architectures and technologies raise new questions that need to be addressed in a thorough way by science. More than ever, results from within laboratories need to be shared across the academic community and industry to address new educational and business opportunities. This year, CAiSE will, as it has always been, act as a forum of discussion that brings together researchers and practitioners in the field of information systems engineering. It will be the place to share mature research results as well as ground-breaking ideas, and experience reports in information systems engineering.

CAiSE welcomes all submissions that fall in the domain of information systems engineering, in particular those in the following list. Four kinds of contributions are accepted: technical papers, empirical evaluation papers, reports of experience, and exploratory papers. This year, the conference will be particularly glad to receive exploratory papers that share visions, novel approaches, or insight into new information systems engineering paradigms.

The CAiSE topics of interests include, but are not restricted to:

Methods, techniques and tools for IS engineering
- Innovation and creativity in IS engineering
- Enterprise architecture and enterprise modelling
- Requirements engineering
- Business process modelling, analysis and management
- Requirements, models, and software reuse
- Adaptation, evolution and flexibility issues
- Domain engineering
- IS in networked & virtual organizations
- Method engineering
- Knowledge, information, and data quality
- Languages and models
- Mining, monitoring and predicting
- Variability and configuration
- Matching, compliance and alignment issues
- Conceptual design and modelling
- Security
- Service science

Innovative platforms, architectures and technologies for IS
- Service-oriented architecture
- Model-driven architecture
- Component based development
- Agent architecture
- Distributed, mobile, and open architecture
- Innovative database technology
- Semantic web
- IS and ubiquitous technologies
- Adaptive and context-aware IS

Domain specific IS engineering:
- eGovernment
- Enterprise applications (ERP, COTS)
- Data warehouses and business intelligence
- Workflow systems
- Knowledge management systems
- Content management systems
- Sustainability-aware IS
- Semantic web

Author Guidelines

Types of contributions. We invite four types of original and scientific papers:

Formal and/or technical papers describe original solutions (theoretical, methodological or conceptual) in the field of IS engineering. A technical paper should clearly describe the situation or problem tackled, the relevant state of the art, the position or solution suggested and the potential - or, even better, the evaluated - benefits of the contribution.

Empirical evaluation papers evaluate existing problem situations or validate proposed solutions with scientific means, i.e. by empirical studies, experiments, case studies, simulations, formal analyses, mathematical proofs, etc. Scientific reflection on problems and practices in industry also falls into this category. The topic of the evaluation presented in the paper as well as its causal or logical properties must be clearly stated. The research method must be sound and appropriate.

Experience papers present problems or challenges encountered in practice, relate success and failure stories, or report on industrial practice. The focus is on 'what' and on lessons learned, not on an in-depth analysis of 'why'. The practice must be clearly described and its context must be given. Readers should be able to draw conclusions for their own practice.

Exploratory Papers can describe completely new research positions or approaches, in order to face to a generic situation arising because of new ICT tools or new kinds of activities or new IS challenges. They must describe precisely the situation and demonstrate how current methods, tools, ways of reasoning, or meta-models are inadequate. They must rigorously present their approach and demonstrate its pertinence and correctness to addressing the identified situation.

Submission Conditions. Papers should be submitted in PDF format. The results described must be unpublished and must not be under review elsewhere. Submissions must conform to Springer's LNCS format and should not exceed 15 pages, including all text, figures, references and appendices. Submissions not conforming to the LNCS format, exceeding 15 pages, or being obviously out of the scope of the conference, will be rejected without review. Information about the Springer LNCS format can be found at http://www.springer.de/comp/lncs/authors.html. Three to five keywords characterizing the paper should be indicated at the end of the abstract. The type of paper (technical/empirical evaluation/experience/exploratory paper) should be indicated in the submission.

Publication. Accepted papers will be presented at CAiSE'13 and published in the conference proceedings, which is published in the Springer Lecture Notes in Computer Science (LNCS).

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