ICECCS 2010 and co-located events, St. Anne's College, Oxford, United Kingdom, 22-26 March 2010

Monday & Tuesday 22-23 Mar 2010	Wednesday 24 Mar 2010		Thursday 25 Mar 2010		Friday 26 March 2010
17th IEEE International Conference and Workshops on Engineering of Computer-Based Systems (ECBS 2010) and 7th IEEE International Conference and Workshops on Engineering of Autonomic and Autonomous Systems (EASe 2010)	17th IEEE International Conference and Workshops on Engineering of Computer-Based Systems (ECBS 2010)	09:40 UML&AADL Welcome	09:00–09:15 Organiser announcements		09:00-11:00 ICECCS Session 4
		09:45-11:00 UML&AADL Session 1	09:15-10:15 Keynote – Prof Carlo Ghezzi, Politecnico di Milano		
		11:00-11:30 UML&AADL Coffee break	10:15–10:45 Coffee break		11:00-11:15 Coffee break
		11:30-12:45 UML&AADL Session 2	10:45-12:45 ICECCS Session 2	10:45-12:45 CoSMoS Session 1	11:15-12:15 ICECCS Session 5 12:15-13:15 ICECCS Session 6
	12:45-14:00 ICECCS, UML&AADL and ECBS Lunch		12:45-14:00 Lunch		13:15-14:15 Lunch
	14:00-14:15 ICECCS Opening Note and Welcome		14:00-15:00 CoSMoS Keynote – Dr Tim Kelly, University of York		14:15-16:15 ICECCS Session 7
	14:15–15:15 ICECCS, UML&AADL and ECBS Keynote Prof Bill Roscoe, University of Oxford		15:00-16:30 ICECCS Session 3	15:00-16:30 CoSMoS Session 2	16:15-16:30 Coffee break and participant departure
	15:15-15:30 Coffee break		16:30-16:45 Coffee break		
	15:30-17:30 ICECCS Session 1	15:30-16:15 UML&AADL Session 3	16:45-18:15 Poster Session 1	16:30-18:15 Poster Session 2	
		16:15-17:30 UML&AADL Session 4			
	17:30-18:30 AADL Panel				
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	From 19:30 Joint ICECCS, ECBS, EASe, UML&AADL and CoSMoS Conference Banquet				

Wednesday, 24 March 2010

ICECCS Session 1: Adaptation and Autonomic Systems

Jorge Fox and Siobhán Clarke. An Analysis of Formal Languages for Dynamic Adaptation

Ewoud Werkman, Marc de Jonge, Bas van Schoonhoven and Edwin Matthijssen. <u>Development of Autonomic Management Solutions for the Military</u> <u>Application Domain</u>

Rasmus Adler, Daniel Schneider and Mario Trapp. *Engineering Dynamic Adaptation for Achieving Cost-Efficient Resilience in Software-Intensive Embedded Systems*

Florian Skopik, Daniel Schall and Schahram Dustdar. <u>Trust-based Adaptation in Complex Service-oriented Systems</u>

UML & AADL Session 1

"A MDE-based Process for the Design, Implementation and Validation of Safety Critical Systems" Julien Delange, Laurent Pautet

"Testing Safety Critical Systems with SysML/UML" Matthew Hause, Dave Richards, Andrew Stuart

"Supporting the Design of Safety Critical Systems Using AADL" T. Correa, L.B Becker, J-M Farines, J-P.Bodeveix, M.Filali, F.Vernadat

UML & AADL Session 2

"Expressing and enforcing user-defined constraints of AADL models" Olivier Gilles, Jérôme Hugues

"Formal Modeling for UML/MARTE Concurrency Resources" Pablo Penil, Hector Posadas, Eugenio Villar

"QVT Based Model Transformation from Sequence Diagram to CSP" Li Dan and Li Danning

UML & AADL Session 3

"Knowledge models to reduce the gap between heterogeneous models" David Simon Zayas, Anne Monceaux, Yamine Ait-Ameur

"From MARTE to AADL with a Seamless Process" Isabelle Perseil, Laurent Pautet

UML & AADL Session 4

"Comparison of six ways to extend the scope of Cheddar to AADL v2 with Osate" Michael.Kerboeuf , Alain Plantec, Frank Singhoff, Arnaud Schach, Pierre Dissaux

"OMEGA2: A new version of the profile and the tools" Iulian Ober and Iulia Dragomir

"AADS+: AADL Simulation including the Behavioral Annex" Roberto Varona-Gomez, Eugenio Villar

Thursday, 25 March 2010

ICECCS Session 2: Distributed and Service-Based Applications

Luca Cavallaro, Elisabetta Di Nitto, Carlo Alberto Furia and Matteo Pradella. <u>A Tile-based Approach for Self-assembling Service Compositions</u> Minh Tran, Jun Han and Alan Colman. <u>Service-based Development of Context-aware Automotive Telematics</u> Kristian Ellebaek Kjaer and Klaus Marius Hansen. <u>Modeling and Implementing Ontology-Based Publish/Subscribe using Semantic Web Technologies</u> Ilango Leonardo Sriram and Dave Cliff. <u>Component Placement Effects on Data Centre Performance Scaling</u>

ICECCS Session 3: Formal Methods I

Silvia Bindelli, Elisabetta Di Nitto, Carlo Alberto Furia and Matteo Rossi. *Using Compositionality to Formally Model and Analyze Systems Built of a High Number of Components*

Shinji Kikuchi and Satoshi Tsuchiya. Configuration Procedure Synthesis for Complex Systems using Model Finder

Jeremy Bryans, John Fitzgerald, Alexander Romanovsky and Andreas Roth. *Patterns for Modelling Time and Consistency in Business Information Systems*

Special Session on Complex System Modelling and Simulation 1 & 2

Thomas Stibor and Anastasio Salazar. On Immunological Memory as a Function of a Recursive Proliferation Process

Fiona A. C. Polack, Paul Andrews, Teodor Ghetiu, Mark Read, Susan Stepney, Jon Timmis and Adam Sampson. Reflections on the Simulation of Complex Systems for Science

Tim Hoverd and Adam Sampson. A Transactional Architecture for Simulation

Thomas Anderson and Michael Follows. Representing Plankton Functional Types in Ocean General Circulation Models: Competition, Tradeoffs and Self-Organizing Architecture

Kuiying Deng, Zhuozheng Li and Tianguang Chu. Severe Punishment for Those Who Were Caught

Enrique Kremers, Pablo Viejo, Oscar Barambones and Jose Maria Gonzalez de Durana. A Complex Systems Modelling Approach for Decentralized Simulation of Electrical Microgrids

Poster Session 1

Klaus Lochmann. Engineering Quality Requirements using Quality Models

Thomas Goldschmidt, Steffen Becker and Axel Uhl. Incremental Updates for Textual Modeling of Large Scale Models

Michael Thonhauser, Christian Kreiner and Andreas Leitner. <u>A Model-Based Architecture Supporting Virtual Organizations in Pervasive Systems</u>

Fahad Javed, Naveed Arshad, Fredrik Wallin, Erik Dahlquist and Iana Vassileva. *Engineering Optimization Models at Runtime for Dynamically Adaptive Systems*

Lu Yang, Liqian Yu, Jianwen Tang, Linzhang Wang, Jianhua Zhao and Xuandong Li. <u>McC++/Java: Enabling Multi-core Based Monitoring and Fault Tolerance in</u> <u>C++/Java</u>

Yi Murphey. <u>A Multi-Agent System for Complex Vehicle Fault Diagnostics and Health Monitoring</u>

Poster Session 2

Christopher Power and Helen Petrie. A Case Study in Requirements Elicitation for Accessible E-Learning Systems

Rabeb Mizouni, Daniel Sinnig and Ferhat Khendek. Refining Use Cases with Task Models

Manuel Oriol and Sotirios Tassis. *Testing .NET Code with YETI*

Teodor Ghetiu, Fiona Polack and James Bown. Validating a complex system simulation (CoSMoS poster)

Amelia Ritahani Ismail and Jon Timmis. Modelling the Development of Granuloma Formation for Engineering Complex Swarm Robotic Systems (CoSMoS poster)

Nurulhuda Firdaus Mohd Azmi, Jon Timmis and Fiona Polack. Towards a Principled Design of Bio-inspired Solutions to Complex Problems (CoSMoS poster)

ICECCS Session 4: Formal Methods II

Woongki Baek, Nathan Bronson, Christos Kozyrakis and Kunle Olukotun. <u>Implementing and Evaluating a Model Checker for Transactional Memory Systems</u> Xin An and Jun Pang. <u>Model Checking Round-Based Distributed Algorithms</u>

Shinya Umeno and Nancy Lynch. Automated Formal Verification of the DHCP Failover Protocol Using Timeout Order Abstraction

Vittorio Cortellessa, Antinisca Di Marco and Catia Trubiani. Performance Antipatterns as Logical Predicates

ICECCS Session 5: Real-Time Systems

Jonathan Tate and Iain Bate. Maintaining Stable Node Populations In Long-Lifetime Sensornets

Yue Lu, Thomas Nolte and Christer Norström. Statistical-based Response-Time Analysis of Systems with Execution Dependencies between Tasks

ICECCS Session 6: Model-Driven Engineering

Hannes Schwarz, Jürgen Ebert, Jens Lemcke, Tirdad Rahmani and Srdjan Zivkovic. <u>Using Expressive Traceability Relationships for Ensuring Consistent Process</u> <u>Model Refinement</u>

Vidhi Thapa and Eunjee Song. An Approach to Validating Security Properties in a Real-time System Design

ICECCS Session 7: Requirements

Shelly Park and Frank Maurer. A Network Analysis of Stakeholders in Tool Visioning Process for Story Test Driven Development

Ivonne Erfurth and Kathrin Kirchner. <u>Requirements Elicitation with Adapted CUTA Cards: First Experiences with Business Process Analysis</u>

Russell Lock and Ian Sommerville. <u>Modelling and Analysis of Socio-Technical System of Systems</u>

Hubert Dubois, Marie-Agnès Peraldi-Frati and Fadoi Lakhal. <u>A Model for Requirements Traceability in a Heterogeneous Model-Based Design Process:</u> <u>Application to Automotive Embedded Systems.</u>