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 (Lecture Theatre)		09:00–11:00 ICECCS Session 4
		09:45-11:00 UML&AADL Session 1	09:15-10:15 ICECCS Keynote (Lecture Theatre) 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 (Lecture Theatre)		14:00-15:00 CoSMoS Keynote (Lecture Theatre) Dr Tim Kelly, University of York		14:15-16:15 ICECCS Session 7
	14:15–15:15 ICECCS, UML&AADL and ECBS Keynote (Lecture Theatre) 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	16:45-17:45 Poster Session 1	16:45-17:45 Poster Session 2	
		16:15-17:30 UML&AADL Session 4	17:45-18:30 Poster display (Mary Ogilvie Foyer)		
	17:30-18:30 AADL Panel (Lecture Theatre)				
	From 19:30 Joint ICECCS, ECBS, EASe, UML&AADL and CoSMoS Conference Banquet at Trinity College, Oxford				

Wednesday, 24 March 2010 – ICECCS 2010

10:00-14:00 Registration (Mary Ogilvie Foyer**)**

12:45-14:00 Lunch

14:00-14:15 ICECCS 2010 Opening Note and Welcome (Mary Ogilvie Lecture Theatre**)**

14:15-15:15 Keynote (Mary Ogilvie Lecture Theatre**)**
Session Chair: *Marta Kwiatkowska*

The effectiveness of CSP model checking
A. W. Roscoe, Oxford University Computing Laboratory

15:15-15:30 Coffee Break

15:30-17:30 ICECCS Session I: Adaptation and Autonomic Systems (Mary Ogilvie Lecture Theatre**)**
Session Chair: *Julie McCann*

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

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

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

Trust-Based Adaptation in Complex Service-Oriented Systems
Florian Skopik, Daniel Schall, and Schahram Dustdar

17:30-18:30 AADL Panel (Mary Ogilvie Lecture Theatre**)**
Laurent Pautet, Jerôme Hugues, Mamoun Filal and Frank Singhoff

19:30 Joint ICECCS, ECBS, EASe, UML&AADL and CoSMoS Conference Banquet (Trinity College**)**

Directions to Trinity College (the venue for the conference banquet)

Wednesday, 24 March 2010 – UML & AADL 2010

8:30-9:40 Registration (Mary Ogilvie Foyer**)**

9:40-9:45 Welcome (Hartland Room**)**

9:45-11:00 UML & AADL Session I (Hartland Room**)**

An MDE-Based Process for the Design, Implementation and Validation of Safety-Critical Systems
Julien Delange, Laurent Pautet, Jérôme Hugues, and Dionisio de Niz

Testing Safety Critical Systems with SysML/UML
Matthew Hause, Andrew Stuart, David Richards, and Jon Holt

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

11:00-11:30 Coffee Break

11:30-12:45 UML & AADL Session II (Hartland Room**)**

Expressing and Enforcing User-Defined Constraints of AADL Models
Olivier Gilles and Jérôme Hugues

Formal Modeling for UML/MARTE Concurrency Resources
Pablo Peñil, Héctor Posadas, and Eugenio Villar

QVT Based Model Transformation from Sequence Diagram to CSP
Li Dan

12:45-14:00 Lunch

14:00-14:15 ICECCS 2010 Opening Note and Welcome (Mary Ogilvie Lecture Theatre**)**

14:15-15:15 Keynote (Mary Ogilvie Lecture Theatre)

Session Chair: *Marta Kwiatkowska*

The effectiveness of CSP model checking
A. W. Roscoe, Oxford University Computing Laboratory

15:15-15:30 Coffee Break

15:30-16:15 UML & AADL Session III (Hartland Room)

Knowledge Models to Reduce the Gap between Heterogeneous Models: Application to Aircraft Systems Engineering
David Simon Zayas, Anne Monceaux, and Yamine Ait-Ameur

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

16:15-17:30 UML & AADL Session IV (Hartland Room)

Comparison of Six Ways to Extend the Scope of Cheddar to AADL v2 with Osate
Mickaël Kerboeuf, Alain Plantec, Frank Singhoff, Arnaud Schach, and 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-Gómez and Eugenio Villar

17:30-18:30 AADL Panel (Mary Ogilvie Lecture Theatre)

Laurent Pautet, Jerôme Hugues, Mamoun Filal and Frank Singhoff

19:30 Joint ICECCS, ECBS, EASe, UML&AADL and CoSMoS Conference Banquet (Trinity College)

Thursday, 25 March 2010 – ICECCS 2010

9:00-9:15 Organiser announcements

9:15-10:15 Keynote (Mary Ogilvie Lecture Theatre)
Session Chair: *Marta Kwiatkowska*

On the Use of Quantitative Models for Open-World Software
Carlo Ghezzi, Politecnico di Milano

10:15-10:45 Coffee break

10:45-12:45 ICECCS Session II: Distributed and Service-Based Applications (Mary Ogilvie Lecture Theatre)
Session Chair: *Manuel Oriol*

A Tile-Based Approach for Self-Assembling Service Compositions
Luca Cavallaro, Elisabetta Di Nitto, Carlo A. Furia, and Matteo Pradella

Service-Based Development of Context-Aware Automotive Telematics Systems
Minh H. Tran, Alan Colman, and Jun Han

Modeling and Implementing Ontology-Based Publish/Subscribe Using Semantic Web Technologies
Kristian Ellebæk Kjær and Klaus Marius Hansen

Effects of Component-Subscription Network Topology on Large-Scale Data Centre Performance Scaling
Ilango Sriram and Dave Cliff

10:45-12:45 Special Session on Complex System Modelling and Simulation I (Hartland Room)
Session Chair: *Adam Sampson*

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

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

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

12:45-14:00 Lunch

14:00-15:00 CoSMoS Keynote (Mary Ogilvie Lecture Theatre**)**

Tim Kelly, University of York

15:00-16:30 ICECCS Session III: Formal Methods 1 (Mary Ogilvie Lecture Theatre**)**
Session Chair: *Cristina Seceleanu*

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

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

Patterns for Modelling Time and Consistency in Business Information Systems
J. W. Bryans, J. S. Fitzgerald, A. Romanovsky, and A. Roth

15:00-16:30 Special Session on Complex System Modelling and Simulation II (Hartland Room**)**
Session Chair: *Fiona Polack*

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

A Transactional Architecture for Simulation
Tim Hoverd and Adam T. Sampson

A Complex Systems Modelling Approach for Decentralised Simulation of Electrical Microgrids
Enrique Kremers, Pablo Viejo, Oscar Barambones, and José González de Durana

16:30-16:45 Coffee break

16:45-17:45 Poster Session I (Mary Ogilvie Lecture Theatre)

Session Chair: *Fiona Polack*

Engineering Quality Requirements Using Quality Models
Klaus Lochmann

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

A Model-Based Architecture Supporting Virtual Organizations in Pervasive Systems
Michael Thonhauser, Christian Kreiner, and Andreas Leitner

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

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

A Multi-agent System for Complex Vehicle Fault Diagnostics and Health Monitoring
Yi Lu Murphey and Zhihang Chen

16:45-17:45 Poster Session II (Hartland Room)

Session Chair: *Tim Kelly*

An Experience Report in Requirements Elicitation for Accessible E-Learning Systems
Christopher Power and Helen Petrie

Enriching Use Cases with CTTs
Rabeb Mizouni, Daniel Sinnig, and Ferhat Khendek

Testing .NET Code with YETI
Manuel Oriol and Sotirios Tassis

In Search of Sound 'in silico' Research - Validating a Complex System Simulation (CoSMoS poster)
Teodor Ghetiu, Fiona A. C. Polack, and James L. Bown

Towards Self-Healing Swarm Robotic Systems Inspired by Granuloma Formation (CoSMoS poster)
Amelia Ritahani Ismail and Jon Timmis

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

17:45-18:30 Poster Display (Mary Ogilvie Foyer)

Friday, 26 March 2010 – ICECCS 2010

9:00-11:00 ICECCS Session IV: Formal Methods 2 (Mary Ogilvie Lecture Theatre)
Session Chair: *Shinji Kikuchi*

Implementing and Evaluating a Model Checker for Transactional Memory Systems
Woongki Baek, Nathan Bronson, Christos Kozyrakis, and Kunle Olukotun

Model Checking Round-Based Distributed Algorithms
Xin An and Jun Pang

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

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

11:00-11:15 Coffee break

11:15-12:15 ICECCS Session V: Real-Time Systems (Mary Ogilvie Lecture Theatre)
Session Chair: *Radu Calinescu*

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

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

12:15-13:15 ICECCS Session VI: Model-Driven Engineering (Mary Ogilvie Lecture Theatre)
Session Chair: *Richard Paige*

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

An Approach to Verifying Security and Timing Properties in UML Models
Vidhi Thapa, Eunjee Song, and Hanil Kim

13:15-14:15 Lunch

14:15-16:15 ICECCS Session VII: Requirements (Mary Ogilvie Lecture Theatre**)**

Session Chair: *Isabelle Perseil*

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

Requirements Elicitation with Adapted CUTA Cards: First Experiences with Business Process Analysis
Ivonne Erfurth and Kathrin Kirchner

Modelling and Analysis of Socio-Technical System of Systems
Russell Lock and Ian Sommerville

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

14:15-16:15 Coffee break and participant departure