

| ##### | DAY 1 | ECBS | ICECCS | Workshops |
|-------|-----------|--|--|--|
| 09:00 | Welcome | | | |
| 09:15 | Keynote | | <i>Kevin L. Moore, Colorado School of Mines</i> | |
| 10:15 | Break | | | |
| 10:30 | Session 1 | Software I "Finding Interaction Faults Adaptively using Distance-Based Strategies" Renee Bryce, Charles Colbourn and D. Richard Kuhn. "A Structured Framework for Assessing the "Goodness" of Agile Methods" Shvetha Soundararajan and James Arthur. "Analysis of Applicability for Synchronization Complexity Metric" Peter Yastrebenetsky and Mark Trakhtenbrot. | Real-time systems I "Temporal Abstract Domains" Julien Bertrane "WCET Analysis of Component-Based Systems using Timing Traces" Adam Betts and Amine Marref "Memory Positioning of Real-Time Code for Smaller Worst-Case Execution Times" Amine Marref | 6th IEEE International Workshop on UML and AADL "An Efficient Modeling and Execution Framework for Complex Systems Development" Isabelle Persell, Laurent Pautet, et al. "An Implementation of the Behavior Annex in the AADL-toolset Osate2" Gilles Lasnier, Lutz Wraage, Jerome Hugues and Laurent Pautet |
| 12:00 | Lunch | | | |
| 13:00 | Session 2 | Embedded Systems "Hardware/Software Communication Middleware for Data Adaptable Embedded Systems" Sachidanand Mahadevan, Vijay Gopinath, Roman Lysecky, Jonathan Sprinkle, Jerzy Rozenblit and Michael Marcellin. "MoPED: A Model-based Provisioning Engine for Dependability in Component-based Distributed Real-time Embedded Systems" Sumant Tambe, Akshay Dabholkar and Aniruddha Gokhale. "Hardware Observability Framework for Minimally Intrusive Online Monitoring of Embedded Systems" Jong Chul Lee, Andrew Gardner and Roman Lysecky. "GeTeX: A Tool for Testing Real-Time Embedded Systems Using CAN Applications" Mohammad Aboutab, Steve Counsell and Robert Hierons. | Real-time systems II "Tighter schedulability analysis of synchronization protocols based on overrun without payback for hierarchical scheduling frameworks" Moris Behnam, Thomas Nolte and Reinder Bril "A Model-Driven Framework for the Development of Portable Real-time Embedded Systems" Wassim El Hajj Chehade, Ansgar Radermacher, François Terrier, Bran Selic and Sebastien Gerard "Timed Circus: Timed CSP with the Miracle" Kun Wei, Jim Woodcock and Alan Burns "Verification of MARTE/CCSL Time Requirements with Promela/SPIN" Yin Ling, Frédéric Mallet and Jing Liu | 6th IEEE International Workshop on UML and AADL "Modeling and verification of memory architectures with AADL and REAL" Stéphane Rubini, Frank Singhoff and Jérôme Hugues "Two Formal Semantics of a Subset of the AADL" Zhibin Yang, Kai Hu, Jean-Paul Bodeveix, Lei Pi, Dianfu Ma and Jean-Pierre Talpin "Requirements Exchange: from Specification Documents to Model" Adegouma Morayo, Dubois Hubert and Terrier François "ABV – A Verifier for the Architecture Analysis and Description Language (AADL)" Stefan Björnander, Cristina Seceleanu, Kristina Lundqvist and Paul Pettersson |
| 15:00 | Break | | | |
| 15:30 | Session 3 | Doctoral Symposium "A Meta Framework for Design Space Exploration" Tripti Saxena and Gabor Karsai. "Queral Networks: Towards an Approach for Engineering Large Artificial Neural Networks" Travis Hoffman, Jerzy Rozenblit, Ali Akoglu and Liana Suantak. "Towards Change Propagating Test Models in Autonomic and Adaptive Systems" Mohammed Akour, Akanksha Jaidev and Tariq King. "Towards an operational safety standard for software" Alois Mayr, Reinhold Plösch and Matthias Saft. | Real-time systems III "Modeling Variability from Requirements to Runtime" Mathieu Acher, Philippe Collet, Philippe Lahire, Sabine Moisan and Jean-Paul Rigault "Formal Model of Interrupt Program from a Probabilistic Perspective" Yongxin Zhao, Yanhong Huang, Jifeng He and Si Liu "Model-Based Simulation of SOAP Web Services From Temporal Logic Specifications" Sylvain Hallé | 6th IEEE International Workshop on UML and AADL "A Tool Set for Integrated Software and Hardware Dependability Analysis Using the Architecture Analysis and Design Language (AADL) and Error Model Annex" Myron Hecht, Alexander Lam and Chris Vogl "Integrating AADL-based Tool Chain into Existing Industrial Processes" Alexey Khoroshilov, Igor Koverninskiy, Alexander Petrenko and Alexander Ugnenko |
| 17:30 | | | | |
| ##### | DAY 2 | ECBS | ICECCS | EASe |
| 09:00 | Welcome | | | |
| 09:15 | Keynote | | <i>Oleg Sokolsky, University of Pennsylvania</i> | |
| 10:15 | Break | | | |
| 10:30 | Session 4 | Computer-Based Systems: Scale, Transition, and Legacy "CZEN: Anisotropic Model of Cloud Computing" Zenon Chaczko. "Fostering the Universal Virtual Computer as Long-Term Preservation Platform" Nico Krebs, Sebastian Rönnau and Uwe M. Borghoff. "Understanding IT Organizations using Viewpoints" Karin Breitman, Simone Barbosa, Percy E. Rivera Salas, Rita Berardi, Jose Viterbo, Tássia Freitas and Thais Batista. | Dynamic Modeling "A Fully Dynamic Approach to the Reverse Engineering of UML Sequence Diagrams" Tewfik Ziad, Marcos Aurélio Almeida da Silva, Lom Messan Hillah and Mikal Ziane "Using Model Transformation to Generate Graphical Counter-Examples for the Analysis of xUML Models" Osmar Marchi dos Santos, Jim Woodcock and Richard Paige "Required Behavior of Sequence Diagrams: Semantics and Refinement" Lunjin Lu and Dae-Kyoo Kim | Distributed & Decentralized Autonomy "Large Scale Monitoring and Online Analysis in a Distributed Virtualized Environment" Rajat Mehrotra, Abhishek Dubey, Sherif Abdelwahed "Distributed Active Objects—A Systemic Approach to Distributed Mobile Applications" Daniel Graff, Jan Richling, Tammo M. Stupp, Matthias Werner "Decentralized Reconfiguration for Self-organizing Resource-Flow Systems Based on Local Knowledge" Gerrit Anders, Hella Seebach, Florian Nafz, Jan-Philipp Steghofer, Wolfgang Reif "Towards a Self-Healing Approach to Sustain Web Services Reliability" Mohamed-Hedi Karray, Chirine Ghedira, Zakaria Maamar, Brigitte Chebel-Morello |
| 12:00 | Lunch | | | |
| 13:00 | Session 5 | Model-Based Design "Measuring and Reducing Modeling Effort in Domain-specific Modeling Languages with Examples" James Hill. "Automated Adaptor Generation for Services Based on Pushdown Model Checking" Hsin-Hung Lin, Toshiaki Aoki and Takuya Katayama. "Model Composition in Rosetta" Nicolas Frisby, Megan Peck, Mark Snyder and Perry Alexander. "UML/OCL and refinement" Mohamed Tahar Bhiri, Mourad Kmimech, Mohamed Graiet and Philippe Anjorté. | MDE I "A Goal-Based Approach to Guide the Design of an Abstract Event-B Specification" Abderrahman Matoussi, Frédéric Gervais and Régine Laleau "Modelling and Analysing Standard Use within System of Systems" Russell Lock "Towards a MDE Transformation Workflow for Dependability Analysis" Leonardo Montecchi, Paolo Lollini and Andrea Bondavalli "Customizing Process Synthesis According to Domain Profiles" Stefan Naujokat, Anna-Lena Lamprrecht and Bernhard Steffen | Modelling and Formal Autonomy / Case Studies "Formal Approaches of Automatic DMARF based on CSP" Jieqi Ding, Huibiao Zhu, Qin Li "Model Checking of Adaptive Programs with Mode-extended Linear Temporal Logic" Yongwang Zhao, Jing Li, Dou Sun, Dianfu Ma "Formal Aspects of Specification and Validation of Dynamic Adaptive System by Analyzing Execution Traces" Arun Mishra, Arun K. Misra "A Comparative Case Study on the Engineering of Self-Testable Autonomic Software" Tariq M. King, Andrew A. Allen, Yali Wu and Peter J. Clarke, Alain E. Ramirez "Applying Adaptive Role-based Model to Self-Adaptive System Constructing Problems: A Case Study" Supasit Monpratarnchai, Tamai Tetsuo "An Empirical Study on the Impacts of Autonomy of Components on Qualities of Software Systems" Tingxun Shi, Jianzhu Ma, Wenpin Jiao, Fanjing Meng |
| 15:00 | Break | | | |
| 15:30 | Session 6 | Component-Based Systems "On the Mitigation of MultiCore-Induced Behavioral Deviations of an Autonomous Ground Vehicle" Jonathan Sprinkle and Brandon Eames. "A Computer-Aided Approach to Hazard Analysis for Automotive Embedded Systems" Roland Mader, Eric Armengaud, Andrea Leitner, Christian Kreiner, Quentin Bourrouilh, Gerhard Griebl, Christian Steger and Reinhold Weiß. "Identifying Potential Core Assets in Service-based Systems to Support the Transition to Service-oriented Product Lines" Matthias Galster and Armin Eberlein. "Pattern-driven Support for Designing Component-based Architectural Models" Jagadish Suryadevara, Cristina Seceleanu and Paul Pettersson. | MDE II "A Component-oriented Metamodel for the Modernization of Software Applications" Luciano Baresi and Matteo Miraz "A Formal Approach to Model Composition Applied to VUML Language" Taoufik Dkaki, Adil Anwar, Sophie Ebersold, Bernard Coulette and Mahmoud Nassar "Leveraging Service-Oriented for Combining Code Generation Frameworks" Sven Jörges and Bernhard Steffen | Bioinspired & Emergence "Description and Composition of Bio-Inspired Design Patterns: the Gossip Case" Jose Luis Fernandez-Marquez, Josep Lluís Arcos, Giovanna Di Marzo Serugendo, Matteo Casadei "Pro-active Advice to Improve the Efficiency of Self-Organizing Emergent Systems" Torsten Steiner, Jörg Denzinger, Holger Kasinger and Bernhard Bauer "Apoptotic Robots" Roy Sterritt |
| 17:30 | | | | |
| ##### | DAY 3 | ECBS | ICECCS | Workshops |
| 09:00 | Welcome | | | |
| 09:15 | Keynote | | <i>Robert France, Colorado State University</i> | |
| 10:15 | Break | | | |
| 10:30 | Session 7 | Distributed and Networked Systems "Reachability Analysis in Dynamically Routed Networks" Miroslav Sveda, Ondrej Rysavy, Gayan de Silva, Petr Matousek and Jaroslav Rab. "Sociometric Modelling in Wireless Sensor Networks" Souren Sinha and Zenon Chaczko. "Formal Verification of Distributed Transaction Management in a SOA Based Control System" Ivana Popovic, Vladislav Vrtunski and Miroslav Popovic. | Intelligent Systems "A Software Requirements Specification Framework for Objective Pattern Recognition: A Set-Theoretic Classification Approach" Arbi Ghazarian, Mehdi Sagheb Tehrani and Arin Ghazarian "A Novel Approach Based on Gestalt Psychology for Abstracting the Content of Large Execution Traces for Program Comprehension" Heidar Pirzadeh and Abdelwahab Hamou-Lhadj "Towards Succinctness in Mining Scenario-Based Specifications" David Lo and Shahar Maoz | 8th IEEE Workshop on Model-Based Development for Computer-Based Systems <i>Agenda TBD</i> |
| 12:00 | Lunch | | | |
| 13:00 | Session 8 | Software II "Scenario-Based Architectural Design Decisions Documentation and Evolution" Meiru Che and Dewayne E. Perry. "A Comparative Case Study of Architecting Practices in the Embedded Software Industry" Håkan Gustavsson and Jakob Axelsson. "Facilitate Software Architecting by Ranking Requirements based on their Impact on the Architecture Process" Matthias Galster and Armin Eberlein. | Communication systems "Modeling and Coordinating Social Interactions in Pervasive Environments" Ashad Kabir, Jun Han and Alan Colman "Group Selection by Nodes in Wireless Sensor Networks Using Coalitional Game Theory" Fatemeh kazemeyni, Einar Broch Johnsen, Olaf Owe and Ilanko Balasingham "LIPS: A Protocol Suite For Homeostatic Sensornet Management" Jonathan Tate and Iain Bate "Computational Social Network Management in Crowdsourcing Environments" Florian Skopik, Daniel Schall and Schahram Dustdar | |
| 15:00 | Break | | | |
| 15:30 | Session 9 | | Parallelism-Intensive and Evolving Software Systems "Parallelism Viewpoint: A Viewpoint to Model Parallelism in Parallelism-Intensive Software Systems" Naeem Muhammad, Nelis Boucke and Yolande Berbers "Analyzing and Forecasting Near-miss Clones in Evolving Software: An Empirical Study" Minhaz Zilbran, Ripon Saha, Muhammad Asaduzzaman and Chanchal K. Roy "On the Impact of Kanban on Software Project Work: An Empirical Case Study Investigation" Marko Ikonen, Elena Pirinen, Fabian Fagerholm, Petri Kettunen and Pekka Abrahamsson | |