

Wednesday, October 3, 2007

9:00 – 9:15 Opening, Welcome Remarks

Parthenon Ballroom

9:15 – 10:30 Keynote

Parthenon Ballroom, Chair: G. Engels

Predicting Value from Early Design Models

Mary Shaw

Carnegie Mellon University, USA

10:30 – 11:00 Break

11:00 – 12:30 Technical Sessions

Session 1a: Model Transformation

Parthenon A+B, Chair: M. Gogolla

Bidirectional Model Transformation in QVT: Semantic Issues and Open Questions

Perdita Stevens

University of Edinburgh, UK

Reconciling TGGs with QVT

Joel Greeneyer, Ekkart Kindler

University of Paderborn, Germany

UniTI: A Unified Transformation Infrastructure

Bert Vanhooff, Dhouha Ayed, Stefan Van Baelen, Wouter Joosen, Yolande Berbers

K. U. Leuven, Belgium

Session 1b: Modeling Constraints

Parthenon D+E, Chair: H. Hußmann

Guided Development with Multiple Domain-Specific Languages

Anders Hesselund¹, Krzysztof Czarnecki², Andrzej Wąsowski¹

¹IT University of Copenhagen, Denmark, ²University of Waterloo, Canada

Model-Driven, Network-Context Sensitive Intrusion Detection

Frederic Massicotte¹, Mathieu Couture¹, Lionel Briand², Yvan Labiche²

¹Communication Research Centre, Ottawa, Canada

²Carleton University, Canada

An Empirical Study of the Impact of OCL Smells and Refactorings on the Understandability of OCL Specifications

Alexandre Correa, Cláudia Werner

Federal University of Rio de Janeiro, Brazil

12:30 – 2:00 Lunch

2:00 – 3:30 Technical Sessions

Session 2a: Meta-Modeling

Parthenon A+B, Chair: Th. Kühne

On Metamodeling in Megamodels

Dragan Gašević¹, Nima Kaviani², Marek Hatala²

¹Athabasca University, Canada

²Simon Fraser University Surrey, Canada

Magritte – A Meta-Driven Approach to Empower Developers and End Users

Lukas Renggli¹, Stephane Ducasse², Adrian Kuhn¹

¹University of Bern, Switzerland

²University of Savoie, France

Matching Model-Snippets

Rodrigo Ramos^{1,2}, Olivier Barais², Jean-Marc Jézéquel²

¹Federal University of Pernambuco, Brazil

²IRISA / INRIA, France

Session 2b: Consistent Models

Parthenon D+E, Chair: R. Breu

Improving Inconsistency Resolution with Side-effect Evaluation and Costs

Jochen M. Küster, Ksenia Ryndina

IBM Zurich Research Laboratory, Switzerland

Model Composition in Product Lines and Feature Interaction Detection using Critical Pair Analysis

Praveen Jayaraman, Jon Whittle, Ahmed M Elkhodary, Hassan Gomaa

George Mason University, USA

Automated Semantic Analysis of Design Models

Frank Weil, Brian Mastenbrook, David Nelson, Paul Dietz, Aswin van den Berg

Motorola, Inc., USA

3:30 – 4:00 Break

4:00 – 5:00 Panel

Parthenon Ballroom

Evaluating MDE Research: Are We Doing Enough

Chairs: Sudipto Ghosh, Robert France, Colorado State University, USA

Thursday, October 4, 2007

8:45 – 10:00 Keynote

Parthenon Ballroom, Chair: J. Whittle

Dependence and Modularity in Software-Intensive Systems Products and Development Processes (The Case of Aspect-Oriented Programming)

Kevin Sullivan

University of Virginia, USA

10:00 – 10:30 Break

10:30 – 12:00 Technical Sessions

Session 3a: Modeling Support

Parthenon A+B, Chair: G. Reggio

Piecewise Modelling with State Subtypes

Friedrich Steinmann¹, Thomas Kühne²

¹Fernuniversität Hagen, Germany

²Technische Universität Darmstadt, Germany

Deriving Operation Contracts from UML Class Diagrams

Jordi Cabot¹, Cristina Gómez²

¹Universitat Oberta de Catalunya, Spain

²Universitat Politècnica de Catalunya, Spain

Finding the Pattern you Need. The Design Pattern Intent Ontology

Holger Kampffmeyer, Steffen Zschaler

Technische Universität Dresden, Germany

Session 3b: User Interface Design

Parthenon D+E, Chair: G. Engels

Model-driven Approach for Managing Human Interface Design Life Cycle

Noi Sukaviriya², Vibha Sinha², Thejaswini Ramachandra³, Senthil Mani²

¹IBM TJ Watson Research Center, USA

²IBM India Research Lab, India

³IBM India Software Group, India

Integrating Heterogeneous Tools into Model-Centric Development of Interactive Applications

Andreas Pleuss, Arnd Vitzthum, Heinrich Hussmann

University of Munich, Germany

A Business Process Driven Approach for Generating E-Commerce User Interfaces

Xulin Zhao¹, Ying Zou¹, Jen Hawkins², Bhadri Madapusi²

¹Queen's University, Canada

²IBM Toronto Laboratory, Canada

12:00 – 1:30 Lunch

1:30 – 3:00 Technical Sessions

Session 4a: Language Definition

Parthenon A+B, Chair: P. Stevens

Enhancing UML Extensions with Operational Semantics – Behavior Profiles with Templates

Arnaud Cuccuru, Chokri Mraidha, François Terrier, Sébastien Gérard

CEA, LIST, France

Integrated Definition of Abstract and Concrete Syntax for Textual Languages

Holger Krahn, Bernhard Rumpe, Steven Völkel

Technische Universität Braunschweig, Germany

Architectural Aspects in UML

Jon Oldevik, Øystein Haugen

University of Oslo, Norway

Session 4b: Modeling Methods

Parthenon C, Chair: G. Georg

Domain Specific Modeling Methodology for Reconfigurable Networked Systems

Gabor Batori¹, Zoltan Theisz², Domonkos Asztalos¹

¹Ericsson Hungary Ltd., Hungary

²Ericsson Ireland Ltd., Ireland

A Modelling Method for Rigorous and Automated Design of Large-Scale Industrial Systems

Kari Leppänen, Sari Leppänen, Markku Turunen

Nokia Research Center, Finland

Relating Navigation and Request Routing Models in Web Applications

Minmin Han¹, Christine Hofmeister²

¹Amazon.com, USA

²Lehigh University, USA

Session 4c: Service and Process Modeling

Parthenon D+E, Chair: J. Küster

A UML2 Profile for Service Modeling

Vina Ermagan, Ingolf H. Krüger

University of California San Diego, USA

Automatic Generation of Workflow-extended Domain Models

Marco Brambilla¹, Jordi Cabot², Sara Comai¹

¹Politecnico di Milano, Italy

²Universitat Oberta de Catalunya, Spain

A Practical Perspective on the Design and Implementation of Service-Oriented Solutions

Alan W. Brown, Marc Delbaere, Simon Johnston

IBM Software Group, USA

3:00 – 3:30 Break

3:30 – 5:00 Technical Sessions

Session 5a: Model Analysis

Parthenon A+B, Chair: S. Ghosh

Constructive Techniques for Meta- and Model-level Reasoning

Ethan K. Jackson, Janos Sztipanovits

Vanderbilt University, USA

A Metamodel-Based Approach for Analyzing Security-Design Models

David Basin¹, Manuel Clavel², Jürgen Doser¹, Marina Egea²

¹ETH Zurich, Switzerland

²Universidad Complutense de Madrid, Spain

UML2Alloy: A Challenging Model Transformation

Kyriakos Anastasakis¹, Behzad Bordbar¹, Geri Georg², Indrakshi Ray²

¹University of Birmingham, UK

²Colorado State University, USA

Session 5b: Modeling Process

Parthenon C, Chair: F. Weil

i²MAP: An Incremental and Iterative Modeling and Analysis Process

Sascha Konrad¹, Heather J. Goldsby², Betty H.C. Cheng²

¹Siemens Corporate Research, Inc., USA

A Model-driven Measurement Procedure for Sizing Web Applications: Design, Automation and Validation

Silvia Abrahão¹, Emilia Mendes², Jaime Gomez³, Emilio Insfran³

¹Valencia University of Technology, Spain

²University of Auckland, New Zealand

³University of Alicante, Spain

Model-Driven Engineering for Software Migration in a Large Industrial Context

Franck Fleurey^{1,2}, Erwan Breton², Benoit Baudry¹, Alain Nicolas², Jean-Marc Jézéquel¹

¹IRISA/INRA, Rennes, France

²Sodifrance, Nantes, France

Session 5c: Aspects

Parthenon D+E, Chair: J. Kienzle

Introducing Variability into Aspect-Oriented Modeling Approaches

Philippe Lahire², Brice Morin¹, Gilles Vanwormhoudt³, Alban Gaignard², Olivier Barais¹, Jean-Marc Jézéquel¹

¹IRISA Rennes, France

²I3S Nice-Sophia Antipolis, France

³Equipe Goal, Villeneuve d'Ascq, France

An Expressive Aspect Composition Language for UML State Diagrams

Jon Whittle¹, Ana Moreira², Joao Araújo², Praveen Jayaraman¹, Ahmed Elkhodary¹, Rasheed Rabbi¹

¹George Mason University, USA

²Universidade Nova de Lisboa, Portugal

Enhancing UML State Machines with Aspects

Gefei Zhang, Matthias Hözl, Alexander Knapp

University of Munich, Germany

5:00 – 6:00 Panel

Parthenon D+E

The Future of Aspect Modeling: Will MDD absorb it?

Chair: João Araújo, Universidade Nova de Lisboa, Portugal

Friday, October 5, 2007

8:45 – 10:00 Keynote

Parthenon Ballroom, Chair: D. Schmidt

Challenges in Developing DoD Software Intensive Systems

Patrick Lardieri

Lockheed Martin Advanced Technology Lab, USA

10:00 – 10:30 Break

10:30 – 12:00 Technical Sessions

Session 6a: New Language Features

Parthenon A+B, Chair: Ø. Haugen

Complementary Use Case Scenario Representations based on Domain Vocabularies

Michał Śmiałek, Jacek Bojarski, Wiktor Nowakowski, Albert Ambroziewicz, Tomasz Straszak
Warsaw University of Technology, Poland

Modeling Time(s)

Charles André, Frédéric Mallet, Robert de Simone
I3S Laboratory (CNRS/UNSA/INRIA) Sophia-Antipolis, France

A UML Profile for Developing Airworthiness-Compliant (RTCA DO-178B), Safety-Critical Software

Gregory Zoughbi^{1,2}, Lionel Briand², Yvan Labiche²

¹General Dynamics Canada, Canada

²Carleton University, Canada

Session 6b: Debugging Support

Parthenon C, Chair: G. Karsai

Forensic Debugging of Model Transformations

Mark Hibberd, Michael Lawley, Kerry Raymond
Queensland University of Technology, Australia

Runtime Debugging Using Reverse-Engineered UML

Orest Pilskalns, Scott Wallace, Filaret Ilas
Washington State University, Canada

Formally Defining a Graphical Language for Monitoring and Checking Object Interactions

Kai Xu, Donglin Liang
University of Minnesota, USA

Session 6c: Statecharts

Parthenon D+E, Chair: A. Agrawal

Statechart Development Beyond WYSIWYG

Steffen Prochnow, Reinhard von Hanxleden
Christian-Albrechts-Universität Kiel, Germany

Model-based Design of Computer-Controlled Game Character Behavior

Jörg Kienzie, Alexandre Denault, Hans Vangheluwe
McGill University, Canada

Model-Driven Construction of Certified Binaries

Sagar Chaki, James Ivers, Peter Lee, Kurt Wallnau, Noam Zeilberger
Carnegie Mellon University, USA

12:00 – 12:15 Farewell

Parthenon Foyer