

2016 IEEE/ACM 8th International Workshop on Modeling in Software Engineering (MiSE 2016)

**Austin, Texas, USA
16 – 17 May 2016**



**IEEE Catalog Number: CFP1698C-POD
ISBN: 978-1-5090-0131-6**

**Copyright © 2016, Association for Computing Machinery
All Rights Reserved**

******This publication is a representation of what appears in the IEEE Digital Libraries. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP1698C-POD
ISBN (Print-On-Demand):	978-1-5090-0131-6
ISBN (Online):	978-1-4503-4164-6
ISSN:	2156-7883

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

8th International Workshop on Modeling in Software Engineering (MiSE 2016)

Table of Contents

Message from the Welcome Chairs	vii
Committees.....	viii
Sponsors and Supporters	x

MDE Technologies and Model Quality

Featured Model Types: Towards Systematic Reuse in Modelling Language Engineering	1
<i>Gilles Perrouin, Moussa Amrani, Mathieu Acher, Benoit Combemale, Axel Legay, and Pierre-Yves Schobbens</i> — <i>PRECISE, University of Namur, Belgium; University of Rennes I / INRIA, France; INRIA, France; IRISA/INRIA, Rennes, France</i>	
An End-to-End Domain Specific Modeling and Analysis Platform.....	8
<i>Arman Shahbazian, George Edwards, and Nenad Medvidovic</i> — <i>University of Southern California, USA; Quandary Peak Research, USA</i>	
Model Level Design Pattern Instance Detection Using Answer Set Programming	13
<i>Gaurab Luitel, Matthew Stephan, and Daniela Incelesan</i> — <i>Miami University, USA</i>	

Transformations (Reverse Engineering, Derivations, Co-Evolution)

fREX: fUML-based Reverse Engineering of Executable Behavior for Software Dynamic Analysis	20
<i>Alexander Bergmayr, Hugo Bruneliere, Jordi Cabot, Jokin Garcia, Tanja Mayerhofer, and Manuel Wimmer</i> — <i>Business Informatics Group (TU Wien), Austria; AtlanMod Team (Inria, Mines Nantes, LINA), France; ICREA - Open University of Catalonia, Spain</i>	
Architecture-Centric Derivation of Products in a Software Product Line	27
<i>Cuong Cu and Yongjie Zheng</i> — <i>University of Missouri - Kansas City, USA</i>	
Examining the Co-evolution Relationship between Simulink Models and Their Test Cases	34
<i>Eric J. Rapos and James R. Cordy</i> — <i>School of Computing, Queen's University, Canada</i>	

Domain-Specific Modelling and Analysis

Modeling Complex Air Traffic Management Systems	41
<i>Neha Rungta, Eric G. Mercer, Franco Raimondi, Bjorn C. Krantz, Richard Stocker, and Andrew Wallace</i>	
— NASA Ames Research Center, CA, USA; Brigham Young University, USA; Middlesex University, United Kingdom of Great Britain and Northern Ireland	
Model Driven Performance Simulation of Cloud Provisioned Hadoop MapReduce Applications	48
<i>Hanieh Alipour, Yan Liu, Abdelwahab Hamou-Lhadj, and Ian Gorton</i>	
— Concordia University, Canada	
Model-Based Analysis of Java EE Web Security Configurations	55
<i>Salvador Martínez, Valerio Cosentino, and Jordi Cabot</i>	
— AtlanMod team (Inria, Mines Nantes, LINA), France; SOM Research Lab. ICREA - UOC, Spain	

Analysis and Compliance

Modeling for Sustainability	62
<i>Benoit Combemale, Betty H.C. Cheng, Ana Moreira, Jean-Michel Bruel, and Jeff Gray</i>	
— IRISA, Université de Rennes 1, France; Michigan State University, USA; Universidade Nova de Lisboa, Portugal; IRIT, France; University of Alabama, USA	
Representing Hierarchical State Machine Models in SMT-LIB	67
<i>Nancy A. Day and Amirhossein Vakili</i>	
— David R. Cheriton School of Computer Science, University of Waterloo, Canada; University of Waterloo, Canada	
Model Management for Regulatory Compliance: A Position Paper	74
<i>Sahar Kokaly, Rick Salay, Mehrdad Sabetzadeh, Marsha Chechik, and Tom Maibaum</i>	
— McMaster University, Canada; University of Toronto, Canada; University of Luxembourg, Luxembourg	

Author Index	81
--------------------	----