2019 IEEE/ACM 11th International Workshop on Modelling in Software Engineering (MiSE 2019)

Montreal, Quebec, Canada 26 - 27 May 2019



IEEE Catalog Number: CFP1998C-POD

ISBN:

978-1-7281-2232-8

Copyright \odot 2019 by the Institute of Electrical and Electronics Engineers, Inc. All Rights Reserved

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

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

 IEEE Catalog Number:
 CFP1998C-POD

 ISBN (Print-On-Demand):
 978-1-7281-2232-8

 ISBN (Online):
 978-1-7281-2231-1

ISSN: 2575-4467

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



2019 IEEE/ACM 11th International Workshop on Modelling in Software Engineering (MiSE) MISE 2019

Table of Contents

Message from the MiSE 2019 Workshop Organizers vii. MiSE 2019 Organizing Committee viii. MiSE 2019 Program Committee ix.
Requirements
Support for User Generated Evolutions of Goal Models .1
Detecting Emergent Behaviors and Implied Scenarios in Scenario-Based Specifications: A Machine Learning Approach 8. Munima Jahan (University of Calgary), Zahra Shakeri Hossein Abad (University of Calgary), and Behrouz Far (University of Calgary)
Towards Web Collaborative Modelling for the User Requirements Notation Using Eclipse Che and Theia IDE .15
Foundations
Belief Uncertainty in Software Models 19
Evaluating the Ability of Developers to Use Metamodels in Model-Oriented Development .2.7
Generic Navigation of Model-Based Development Artefacts .35

Analysis and Testing

A Scalable Monte-Carlo Test-Case Generation Tool for Large and Complex Simulink Models 39
Extracting Counterexamples from Transitive-Closure-Based Model Checking 47. Mitchell Kember (University of Waterloo), Lynn Tran (University of Waterloo), George Gao (University of Waterloo), and Nancy Day (University of Waterloo)
Modeling and Reducing the Attack Surface in Software Systems .55
Reuse
Feature Model for Extensions in Modeling Languages .63. Daniel Devine (Trent University) and Omar Alam (Trent University)
On the Difficulties of Raising the Level of Abstraction and Facilitating Reuse in Software Modelling: The Case for Signature Extension 7.1
MoCoP: Towards a Model Clone Portal .78. Önder Babur (Eindhoven University of Technology) and Matthew Stephan (Miami University)
Application Domains
Model-Based Analysis of Serverless Applications .82
Domain-Specific Languages for the Design, Deployment and Manipulation of Heterogeneous Databases .89 Dimitrios Kolovos (University of York), Fady Medhat (University of York), Richard Paige (University of York & McMaster University), Davide Di Ruscio (University of L'Aquila), Tijs Van Der Storm (Centrum Wiskunde & Informatica), Sebastian Scholze (ATB-Institut für Angewandte Systemtechnik Bremen), and Athanasios Zolotas (University of York)
Enabling Model-Driven Software Development Tools for the Internet of Things .93. Karim Jahed (Queen's University) and Juergen Dingel (Queen's University)
Author Index 101