**Research Session 1: Handling models**
Dynamic Backward Slicing of Model Transformations
Zoltán Ujhelyi, Ákos Horváth and Dániel Varró

X10X: Model Checking a New Programming Language with an "Old" Model Checker
Milos Gligoric, Peter C. Mehlitz and Darko Marinov

Finding the Optimal Balance between Over and Under Approximation of Models Inferred from Execution Logs
Paolo Tonella, Alessandro Marchetto, Cu Duy Nguyen, Kiran Lakhotia, Yue Jia and Mark Harman

**Research Session 2: Fault localization**
AutoFLox: An Automatic Fault Localizer for Client-Side JavaScript
Frolin Ocariza, Karthik Pattabiraman and Ali Mesbah

Tester Feedback Driven Fault Localization
Aritra Bandyopadhyay and Sudipto Ghosh

A Unified Approach For Localizing Non-Deadlock Concurrency Bugs
Sangmin Park, Richard Vuduc and Mary Jean Harrold

**Research Session 3: Database & GUI testing**
Empirical Studies on Test Effectiveness for Database Applications
Chixiang Zhou and Phyllis Frankl

Test Adequacy Evaluation for the User-Database Interaction
Raquel Blanco and Javier Tuya

AutoBlackTest: Automatic Black-Box Testing of Interactive Applications
Leonardo Mariani, Mauro Pezzè, Oliviero Riganelli and Mauro Santoro

**Research Session 4: Constraint solving**
Lightweight Data-flow Analysis for Execution-driven Constraint Solving
Junaid Haroon Siddiqui, Darko Marinov and Sarfraz Khurshid

Bounded Program Verification using an SMT solver: A Case Study
Tianhai Liu, Michael Nagel and Mana Taghdiri

Symbolic Execution with Interval Constraint Solving and Meta-Heuristic Search
Mateus Borges, Marcelo D’Amorim, Saswat Anand, David Bushnell and Corina Pasareanu

**Research Session 5: Search-based testing**
The Seed is Strong: Seeding Strategies in Search-based Software Testing
Gordon Fraser and Andrea Arcuri

Searching the Boundaries of a Modeling Space to Test Metamodels
Juan Cadavid, Benoit Baudry and Houari Sahraoui

Search-based Test Input Generation for String Data Types Using the Results of Web Queries
Phil Mcminn, Muzammil Shahbaz and Mark Stevenson

**Research Session 6: Web applications**
Crawlability Metrics for Web Applications
Nadia Alshahwan, Mark Harman, Alessandro Marchetto, Roberto Tiella and Paolo Tonella
Leveraging User-Privilege Classification to Customize Usage-based Statistical Models of Web Applications  
*Sara Sprenkle, Camille Cobb and Lori Pollock*

CrossCheck: Combining Crawling and Differencing to Better Detect Cross-Browser Incompatibilities in Web Applications  
*Shauvik Roy Choudhary, Mukul Prasad and Alessandro Orso*

Research Session 7: Faults studies
An Empirical Study of Pre-Release Software Faults in an Industrial Product Line  
*Tom Devine, Katerina Goseva-Popstojanova, Sandeep Krishnan, Robyn Lutz and Jenny Li*

Software Behavior and Failure Clustering: An Empirical Study of Fault Causality  
*Nicholas DiGiuseppe and James Jones*

Random Testing: Evaluation of a Law Describing the Number of Faults Found  
*Manuel Oriol*

Research Session 8: Test evolution
Dynamic Shape Analysis using Topological and Spectral Graph Properties  
*Muhammad Zubair Malik and Sarfraz Khurshid*

An Effective Regression Testing Approach for PHP Web Applications  
*Aaron Marback, Hyunsook Do and Nathan Ehresmann*

Supporting Test Suite Evolution through Test Case Adaptation  
*Mehdi Mirzaaghaei, Fabrizio Pastore and Mauro Pezzè*

Research Session 9: Domain-specific testing
Testing Conformance of Lifecycle-Dependent Properties of Mobile Applications  
*Dominik Franke, Carsten Weise, Nath Prakobkosol and Stefan Kowalewski*

Formal Model-Based Test for AUTOSAR multicore RTOS  
*Ling Fang, Takashi Kitamura and Hitoshi Ohsaki*

@tComment: Testing Javadoc Comments to Detect Comment-Code Inconsistencies  
*Shin Hwei Tan, Darko Marinov, Lin Tan and Gary Leavens*

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Generating String Test Data for Code Coverage  
*Michael Beyene and James Andrews*

Better Algorithms to Minimize the Cost of Test Paths  
*Nan Li, Fei Li and Jeff Offutt*

Semantic Mutation Analysis of Floating-point Comparison  
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Behaviourally Adequate Software Testing  
*Gordon Fraser and Neil Walkinshaw*

Generating Checking Sequences for Nondeterministic Finite State Machines  
*Alexandre Petrenko, Adenilso Simao and Nina Yevtushenko*
Evaluating Machine-Independent Metrics for State-Space Exploration
*Vilas Jagannath, Matt Kirn, Yu Lin and Darko Marinov*

**Research Session 12: Empirical studies**
Comparing the Effectiveness of Equivalence Partitioning, Branch Testing and Code Reading by Stepwise Abstraction Applied by Subjects
*Natalia Juristo, Sira Vegas, Martin Solari, Silvia Abrahao and Isabel Ramos*

Scalable Distributed Concolic Testing Approach: An Empirical Evaluation
*Moonzoo Kim, Yunho Kim and Gregg Rothermel*

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CARIAL: Cost-Aware Software Reliability Improvement with Active Learning
*Boya Sun, Gang Shu, Andy Podgurski and Soumya Ray*

Identifying Failure-Inducing Combinations in a Combinatorial Test Set
*Laleh Shikh Gholamhossein Ghandehari, Yu Lei, Tao Xie, Richard Kuhn and Raghu Kacker*

Weighted System Dependence Graph
*Fang Deng and James Jones*

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*Moonzoo Kim, Yunho Kim and Yoonkyu Jang*

Automated Unit Testing of a SCADA Control Software: An Industrial Case Study based on Action Research
*Shahnewaz Amin Jolly, Vahid Garousi and Matt M. Eskandar*

A Large Scale Empirical Study on User-Centric Performance Analysis
*Shahed Zaman, Bram Adams and Ahmed E. Hassan*

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*Jan Friso Groote, Ammar Osaiweran and Jacco Wesselius*

Securing Opensource Code via Static Analysis
*Raghudeep Kannavara*

Towards Automated Anomaly Report Assignment in Large Complex Systems using Stacked Generalization
*Leif Jonsson, David Broman, Kristian Sandahl and Sigrid Eldh*

**Industrial Session 3: Test automation**
An Integrated Model-Driven Approach for Mechatronic Systems Testing
*Roberto Silva Filho and Christof J. Budnik*

CAST: Automating Software Tests for Embedded Systems
*Michael Wahler, Ettore Ferranti, Robin Steiger, Rahul Jain and Kristian Nagy*

When a GUI Regression Test Failed, Which Should Be Blamed?
*Jin Chen, Mengxiang Lin and Kai Yu*
Ph.D. Symposium

A Smart Structured Test Automation Language (SSTAL)
Nan Li

Industrial Applicability of Visual GUI testing for System and Acceptance Test Automation
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Mitigating the Effect of Coincidental Correctness in Spectrum Based Fault Localization
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Prioritization of Test Cases using Software Agents and Fuzzy Logic
Christoph Malz, Nasser Jazdi and Peter Göhner

Towards Practical Debugging for Regression Faults
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Using Statistical Process Control for Root Cause Analysis of Load Test Problems
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Web Mutation Testing
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