

Table of Contents

Keynote Talks

Abstraction as a Unifying Link for Formal Approaches to Concurrency	1
<i>Cliff B. Jones</i>	
A Rule-Based and Imperative Language for Biochemical Modeling and Simulation	16
<i>Durica Nikolić, Corrado Priami, and Roberto Zunino</i>	

Regular Papers

Sound Control-Flow Graph Extraction for Java Programs with Exceptions	33
<i>Afshin Amighi, Pedro de C. Gomes, Dilian Gurov, and Marieke Huisman</i>	
Checking Sanity of Software Requirements	48
<i>Jiří Barnat, Petr Bauch, and Luboš Brim</i>	
TVAL+ : TVLA and Value Analyses Together	63
<i>Pietro Ferrara, Raphael Fuchs, and Uri Juhasz</i>	
A Systematic Approach to Atomicity Decomposition in Event-B	78
<i>Asieh Salehi Fathabadi, Michael Butler, and Abdolbaghi Rezazadeh</i>	
Compositional Reasoning about Shared Futures	94
<i>Crystal Chang Din, Johan Dovland, and Olaf Owe</i>	
Verification of Aspectual Composition in Feature-Modeling	109
<i>Qinglei Zhang, Ridha Khedri, and Jason Jaskolka</i>	
A Denotational Model for Instantaneous Signal Calculus	126
<i>Yongxin Zhao, Longfei Zhu, Huibiao Zhu, and Jifeng He</i>	
A Timed Mobility Semantics Based on Rewriting Strategies	141
<i>Gabriel Ciobanu, Maciej Koutny, and Jason Steggles</i>	
Towards a Formal Component Model for the Cloud	156
<i>Roberto Di Cosmo, Stefano Zacchiroli, and Gianluigi Zavattaro</i>	
The Rely/Guarantee Approach to Verifying Concurrent BPEL Programs	172
<i>Huibiao Zhu, Qiwen Xu, Chris Ma, Shengchao Qin, and Zongyan Qiu</i>	

Completing the Automated Verification of a Small Hypervisor – Assembler Code Verification	188
<i>Wolfgang Paul, Sabine Schmaltz, and Andrey Shadrin</i>	
A Configuration Approach for IMA Systems	203
<i>Visar Januzaj, Stefan Kugele, Florian Biechele, and Ralf Mauersberger</i>	
polyLARVA: Runtime Verification with Configurable Resource-Aware Monitoring Boundaries	218
<i>Christian Colombo, Adrian Francalanza, Ruth Mizzi, and Gordon J. Pace</i>	
Frama-C: A Software Analysis Perspective	233
<i>Pascal Cuoq, Florent Kirchner, Nikolai Kosmatov, Virgile Prevosto, Julien Signoles, and Boris Yakobowski</i>	
An Optimization Approach for Effective Formalized fUML Model Checking	248
<i>Islam Abdelhalim, Steve Schneider, and Helen Treharne</i>	
Efficient Probabilistic Abstraction for SysML Activity Diagrams	263
<i>Samir Ouchani, Otmane Ait Mohamed, and Mourad Debbabi</i>	
ML Dependency Analysis for Assessors	278
<i>Philippe Ayrault, Vincent Benayoun, Catherine Dubois, and François Pessaux</i>	
An Improved Test Generation Approach from Extended Finite State Machines Using Genetic Algorithms	293
<i>Raluca Lefticaru and Florentin Ipate</i>	
Securely Accessing Shared Resources with Concurrent Constraint Programming	308
<i>Stefano Bistarelli and Francesco Santini</i>	

Short Papers

A Practical Approach for Closed Systems Formal Verification Using Event-B	323
<i>Brett Bicknell, Jose Reis, Michael Butler, John Colley, and Colin Snook</i>	
Extensible Specifications for Automatic Re-use of Specifications and Proofs	333
<i>Daniel Matichuk and Toby Murray</i>	
Implementing Tactics of Refinement in CRefine	342
<i>Madiel Conserva Filho and Marcel Vinicius Medeiros Oliveira</i>	

Tool Papers

JSXM: A Tool for Automated Test Generation	352
<i>Dimitris Dranidis, Konstantinos Bratanis, and Florentin Ipate</i>	
A Low-Overhead, Value-Tracking Approach to Information Flow Security	367
<i>Kostyantyn Vorobyov, Padmanabhan Krishnan, and Phil Stocks</i>	
Author Index	383