

# Contents

Quantitative Analysis of Collective Adaptive Systems . . . . .	1
<i>Jane Hillston</i>	
What You Always Wanted to Know About Model Checking of Fault-Tolerant Distributed Algorithms . . . . .	6
<i>Igor Konnov, Helmut Veith, and Josef Widder</i>	
Applying MDA to Generate Hadoop Based Scientific Computing Applications. . . . .	22
<i>Darkhan Akhmed-Zaki, Madina Mansurova, Bazargul Matkerim, Ekateryna Dadykina, and Bolatzhan Kumalakov</i>	
Site-Level Web Template Extraction Based on DOM Analysis . . . . .	36
<i>Julián Alarte, David Insa, Josep Silva, and Salvador Tamarit</i>	
Verification Support for a State-Transition-DSL Defined with Xtext . . . . .	50
<i>Thomas Baar</i>	
Towards Using Exact Real Arithmetic for Initial Value Problems . . . . .	61
<i>Franz Brauße, Margarita Korovina, and Norbert Th. Müller</i>	
Constraint Solving for Verifying Modal Specifications of Workflow Nets with Data . . . . .	75
<i>Hadrien Bride, Olga Kouchnarenko, and Fabien Peureux</i>	
Behavioural Analysis of Sessions Using the Calculus of Structures . . . . .	91
<i>Gabriel Ciobanu and Ross Horne</i>	
Using Refinement in Formal Development of OS Security Model . . . . .	107
<i>Petr N. Devyanin, Alexey V. Khoroshilov, Victor V. Kuliamin, Alexander K. Petrenko, and Ilya V. Shchepetkov</i>	
Conflict Resolution in Multi-agent Systems with Typed Connections for Ontology Population. . . . .	116
<i>Natalia Garanina, Elena Sidorova, and Stepan Anokhin</i>	
Maximally-Polyvariant Partial Evaluation in Polynomial Time . . . . .	130
<i>Robert Glück</i>	
Dynamics Security Policies and Process Opacity for Timed Process Algebras. . . . .	149
<i>Damas P. Gruska</i>	

Estimating Development Effort for Software Architectural Tactics. . . . .	158
<i>Mohamad Kassab and Giuseppe Destefanis</i>	
Clone Detection in Reuse of Software Technical Documentation. . . . .	170
<i>Dmitrij Koznov, Dmitry Luciv, Hamid Abdul Basit, Ouh Eng Lieh, and Mikhail Smirnov</i>	
Modeling Actor Systems Using Dynamic I/O Automata. . . . .	186
<i>Ilham W. Kurnia and Arnd Poetzsch-Heffter</i>	
RSSA: A Reversible SSA Form . . . . .	203
<i>Torben Ægidius Mogensen</i>	
Checking Several Requirements at once by CEGAR . . . . .	218
<i>Vitaly Mordan and Vadim Mutilin</i>	
Unifying Requirements and Code: An Example . . . . .	233
<i>Alexandr Naumchev, Bertrand Meyer, and Victor Rivera</i>	
Program Schemata Technique to Solve Propositional Program Logics Revised . . . . .	245
<i>Nikolay Shilov</i>	
Automated Two-Phase Composition of Timed Web Services . . . . .	260
<i>Maciej Szreter</i>	
Equivalence of Finite-Valued Symbolic Finite Transducers. . . . .	276
<i>Margus Veanes and Nikolaj Bjørner</i>	
Relaxed Parsing of Regular Approximations of String-Embedded Languages . . . . .	291
<i>Ekaterina Verbitskaia, Semyon Grigorev, and Dmitry Avdyukhin</i>	
Branching Processes of Timed Petri Nets . . . . .	303
<i>Irina Virbitskaite, Victor Borovlyov, and Louchka Popova-Zeugmann</i>	
Implementation and Evaluation of Contextual Natural Deduction for Minimal Logic. . . . .	314
<i>Bruno Woltzenlogel Paleo</i>	
Hybrid Lustre . . . . .	325
<i>Zhenghen Yuan, Tingliang Zhou, Jing Liu, Juan Luo, Yi Zhang, and Xiaohong Chen</i>	
<b>Author Index</b> . . . . .	341

Perspectives of System Informatics

10th International Andrei Ershov Informatics

Conference, PSI 2015, in Memory of Helmut Veith, Kazan

and Innopolis, Russia, August 24-27, 2015, Revised

Selected Papers

Mazzara, M.; Voronkov, A. (Eds.)

2016, X, 341 p. 90 illus., Softcover

ISBN: 978-3-319-41578-9