

Contents

Descriptive Types for Linked Data Resources	1
<i>Gabriel Ciobanu, Ross Horne, and Vladimiro Sassone</i>	
2 ⁵ Years of Model Checking	26
<i>Edmund M. Clarke and Qinsi Wang</i>	
Big Data, Big Systems, Big Challenges: A Personal Experience	41
<i>Vadim E. Kotov</i>	
An Automatic Technique for Static Deadlock Prevention	45
<i>Bertrand Meyer</i>	
Automatically Partitioning Data to Facilitate the Parallelization of Functional Programs	59
<i>Michael Dever and G.W. Hamilton</i>	
Lingva: Generating and Proving Program Properties Using Symbol Elimination	67
<i>Ioan Dragan and Laura Kovács</i>	
Neutralizing Semantic Ambiguities of Function Block Architecture by Modeling with ASM.	76
<i>Sandeep Patil, Victor Dubinin, Cheng Pang, and Valeriy Vyatkin</i>	
On Tractability of Disjoint AND-Decomposition of Boolean Formulas	92
<i>Pavel Emelyanov and Denis Ponomaryov</i>	
A Multi-agent Text Analysis Based on Ontology of Subject Domain.	102
<i>Natalia Garanina, Elena Sidorova, and Eugene Bodin</i>	
Towards High-Level Programming for Systems with Many Cores.	111
<i>Sergei Gorlatch and Michel Steuwer</i>	
Inductive Prover Based on Equality Saturation for a Lazy Functional Language	127
<i>Sergei Grechanik</i>	
Timed History Preserving Bisimulation and Open Maps.	142
<i>Nataliya S. Gribovskaya</i>	
Process Opacity for Timed Process Algebra	151
<i>Damas P. Gruska</i>	

A Proof-Based Method for Modelling Timed Systems	161
<i>Alexei Iliasov and Jeremy Bryans</i>	
Asymptotic Speedups, Bisimulation and Distillation (Work in Progress).	177
<i>Neil D. Jones and G.W. Hamilton</i>	
Certifying Supercompilation for Martin-Löf's Type Theory	186
<i>Ilya Klyuchnikov and Sergei Romanenko</i>	
Index Sets as a Measure of Continuous Constraint Complexity	201
<i>Margarita Korovina and Oleg Kudinov</i>	
Decidability and Expressiveness of Recursive Weighted Logic	216
<i>Kim Guldstrand Larsen, Radu Mardare, and Bingtian Xue</i>	
Supercompilation for Datatypes.	232
<i>Torben Ægidius Mogensen</i>	
More Type Inference in Java 8	248
<i>Martin Plümicke</i>	
Polynomial-Time Optimal Pretty-Printing Combinators with Choice	257
<i>Anton Podkopaev and Dmitri Boulytchev</i>	
The Study of Multidimensional R-Tree-Based Index Scalability in Multicore Environment	266
<i>Kirill Smirnov, George Chernishev, Pavel Fedotovskiy, George Erokhin, and Kirill Cherednik</i>	
Skeblle: A New Kind of Diagramming Tool with Programmable Active Diagrams	273
<i>Vinodh Kumar Sunkara and Aamod Sane</i>	
The Role of Indirections in Lazy Natural Semantics	288
<i>Lidia Sánchez-Gil, Mercedes Hidalgo-Herrero, and Yolanda Ortega-Mallén</i>	
Model Checking Value-Passing Modal Specifications	304
<i>Maurice H. ter Beek, Stefania Gnesi, and Franco Mazzanti</i>	
Towards Specializing JavaScript Programs	320
<i>Peter Thiemann</i>	
Symbolic String Transformations with Regular Lookahead and Rollback	335
<i>Margus Veanes</i>	
Towards Symbolic Execution in Erlang	351
<i>Germán Vidal</i>	

Bonsai: Cutting Models Down to Size	361
<i>Stefan Vijzelaar, Kees Verstoep, Wan Fokkink, and Henri Bal</i>	
Comparing Semantics Under Strong Timing of Petri Nets	376
<i>Irina Virbitskaite and Dmitry Bushin</i>	
Probabilistic Formal Concepts with Negation	385
<i>E.E. Vityaev and V.V. Martinovich</i>	
Modeling Environment for Static Verification of Linux Kernel Modules	400
<i>Alexey Khoroshilov, Vadim Mutilin, Evgeny Novikov, and Ilja Zakharov</i>	
Author Index	415