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Disciplina	005.1
Soggetti	Computer science Compilers (Computer programs) Software engineering Computer Science Logic and Foundations of Programming Compilers and Interpreters Software Engineering Theory of Computation
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Nota di contenuto	Descriptive Types for Linked Data Resources -- 25 Years of Model Checking -- The Laws of Concurrent Programming -- Big Data, Big Systems, Big Challenges: A Personal Experience -- An Automatic Technique for Static Deadlock Prevention -- Automatically Partitioning Data to Facilitate the Parallelization of Functional Programs -- Lingva: Generating and Proving Program Properties Using Symbol -- Neutralizing Semantic Ambiguities of Function Block Architecture by Modeling with ASM -- On Tractability of Disjoint AND-Decomposition of Boolean Formulas -- A Multi-agent Text Analysis Based on Ontology of Subject Domain -- Towards High-Level Programming for Systems with Many Cores -- Inductive Prover Based on Equality Saturation for a Lazy Functional Language Timed History Preserving Bisimulation and Open Maps -- Process Opacity for Timed Process Algebra -- A Proof-based Method for Modeling Timed Systems -- Asymptotic Speedups,

Bisimulation and Distillation -- Certifying Supercompilation for Martin-Löf's Type Theory -- Index Sets as a Measure of Continuous Constraint Complexity -- Decidability and Expressiveness of Recursive Weighted Logic -- Supercompilation for Datatypes -- More type Inference in Java 8 -- Polynomial-Time Optimal Pretty-Printing Combinators with Choice -- The Study of Multidimensional R-Tree-based Index Scalability in Multicore Environment -- Skebble: A new Kind of Diagramming Tool with Programmable Active Diagrams -- The Role of Indirections in Lazy Natural Semantics -- Model Checking Value-Passing Modal Specifications -- Towards Specializing JavaScript Programs -- Symbolic String Transformations with Regular Lookahead and Rollback -- Towards Symbolic Execution in Erlang -- Bonsai: Cutting Models Down to Size -- Comparing Semantics Under Strong Timing of Petri Nets -- Probabilistic Formal Concepts for Contexts with Negation -- Modeling Environment for Static Verification of Linux Kernel Modules.

Sommario/riassunto

This book contains the thoroughly refereed papers from the 9th International Ershov Informatics Conference, PSI 2014, held in St. Petersburg, Russia, in June 2014. The 17 revised full papers, 11 revised short papers, and 2 system and experimental papers presented in this book were carefully reviewed and selected from 80 submissions. The volume also contains 5 keynote talks which cover a range of hot topics in computer science and informatics. The papers cover various topics related to the foundations of program and system development and analysis, programming methodology and software engineering and information technologies.
