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Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 5156
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Soggetti	Software engineering Compilers (Computer programs) Computer programming Computer science Software Engineering Compilers and Interpreters Programming Techniques Computer Science Logic and Foundations of Programming
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Contributions -- Residual Checking of Safety Properties -- The Case for Context-Bounded Verification of Concurrent Programs -- Combining Static and Dynamic Reasoning for the Discovery of Program Properties -- Using Dynamic Symbolic Execution to Improve Deductive Verification -- Regular Papers -- Automated Evaluation of Secure Route Discovery in MANET Protocols -- Model Checking Abstract Components within Concrete Software Environments -- Generating Compact MTBDD-Representations from Probmela Specifications -- Dynamic Delayed Duplicate Detection for External Memory Model Checking -- State Focusing: Lazy Abstraction for the Mu-Calculus -- Efficient Modeling of Concurrent Systems in BMC -- Tackling Large Verification Problems with the Swarm Tool -- Formal Verification of a Flash Memory Device Driver -- An Experience Report -- Layered Duplicate Detection in External-Memory Model Checking -- Dependency Analysis for Control

Flow Cycles in Reactive Communicating Processes -- Improved On-the-Fly Equivalence Checking Using Boolean Equation Systems -- Resource-Aware Verification Using Randomized Exploration of Large State Spaces -- Incremental Hashing for Spin -- Verifying Compiler Based Refinement of Bluespec TM Specifications Using the SPIN Model Checker -- Symbolic Context-Bounded Analysis of Multithreaded Java Programs -- Efficient Stateful Dynamic Partial Order Reduction -- Symbolic String Verification: An Automata-Based Approach -- Verifying Multi-threaded C Programs with SPIN.

Sommario/riassunto

This book constitutes the refereed proceedings of the 15th International SPIN workshop on Model Checking Software, SPIN 2008, held in Los Angeles, CA, USA, in August 2008. The 17 revised full papers presented together with 1 tool paper and 4 invited talks were carefully reviewed and selected from 41 submissions. The main focus of the workshop series is software systems, including models and programs. The papers cover theoretical and algorithmic foundations as well as tools for software model checking and foster interactions and exchanges of ideas with related areas in software engineering, such as static analysis, dynamic analysis, and testing.
