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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Satisfiability Modulo Theories for Model Checking -- SMT-Based Software Model Checking -- Symbolic Object Code Analysis -- Model Checking in Context -- Experimental Comparison of Concolic and Random Testing for Java Card Applets -- Combining SPIN with ns-2 for Protocol Optimization -- Automatic Generation of Model Checking Scripts Based on Environment Modeling -- Implementation and

Performance of Model Checking -- Model Checking: Cleared for Take Off -- Context-Enhanced Directed Model Checking -- Efficient Explicit-State Model Checking on General Purpose Graphics Processors -- The SpinJa Model Checker -- LTL and Büchi Automata -- On the Virtue of Patience: Minimizing Büchi Automata -- Enacting Declarative Languages Using LTL: Avoiding Errors and Improving Performance -- Nevertrace Claims for Model Checking -- Infinite State Models -- A False History of True Concurrency: From Petri to Tools -- Analysing Mu-Calculus Properties of Pushdown Systems -- Time-Bounded Reachability in Distributed Input/Output Interactive Probabilistic Chains -- An Automata-Based Symbolic Approach for Verifying Programs on Relaxed Memory Models -- Concurrent Software -- Context-Bounded Translations for Concurrent Software: An Empirical Evaluation -- One Stack to Run Them All.

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## Sommario/riassunto

This volume contains the proceedings of the 17th International SPIN Workshop on Model Checking Software (SPIN 2010). The workshop was organized by and held at the University of Twente, The Netherlands, on 27-29 September 2010. The workshop was co-located with the 5th International Conference on Graph Transformation (ICGT 2010) and several of its satellite workshops, and with the joint PDMC and HiBi workshops, on Parallel and Distributed Methods for verification and on High-performance computational systems Biology. The SPIN workshop is a forum for practitioners and researchers interested in state-space analysis of software-intensive systems. This is applicable in particular to concurrent and asynchronous systems, including protocols. The name of the workshop reflects the SPIN model checking tool by Gerard J. Holzmann, which won the ACM System Software Award 2001, and is probably the most widely used industrial-strength model checker around. The focus of the workshop is on theoretical advances and extensions, algorithmic improvements, and empirical evaluation studies of (mainly) state-based model checking techniques, as implemented in the SPIN model checker and other tools. The workshop encourages interaction and exchange of ideas with all related areas in software engineering. To this end, we co-located SPIN 2010 with the graph transformation, and high-performance analysis communities. This year, we received 33 submissions, divided between 29 regular and 4 tool papers. Each paper was rigorously reviewed by at least four reviewers, and judged on its quality and its significance and relevance for SPIN. We accepted 13 regular papers, and 2 tool papers for presentation and for publication in this volume.

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