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Titolo	Tools and Algorithms for the Construction and Analysis of Systems : 23rd International Conference, TACAS 2017, Held as Part of the European Joint Conferences on Theory and Practice of Software, ETAPS 2017, Uppsala, Sweden, April 22-29, 2017, Proceedings, Part II // edited by Axel Legay, Tiziana Margaria
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Descrizione fisica	1 online resource (XXIV, 411 p. 88 illus.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 10206
Disciplina	005.1
Soggetti	Computer science Algorithms Software engineering Compilers (Computer programs) Machine theory Computer Science Logic and Foundations of Programming Software Engineering Theory of Computation Compilers and Interpreters Formal Languages and Automata Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Security -- Static Detection of DoS Vulnerabilities in Programs that use Regular Expressions -- Discriminating Traces with Time -- Directed Automated Memory Performance Testing -- Context-bounded Analysis for POWER -- Run-Time Verification and Logic. -Rewriting-Based Runtime Verification of Alternation-Free HyperLTL Formulas -- Almost Event-Rate Independent Monitoring of Metric Temporal Logic -- Optimal Translation of LTL to Limit Deterministic Automata -- Quantitative Systems -- Sequential Convex Programming for the Efficient Verification of Parametric MDPs -- JANI: Quantitative Model

and Tool Interaction -- Computing Scores of Forwarding Schemes in Switched Networks with Probabilistic Faults -- Long-run Rewards for Markov Automata -- SAT and SMT -- HiFrog: SMT-based Function Summarization for Software Verification -- Congruence Closure with Free Variables -- On Optimization Modulo Theories, MaxSMT and Sorting Networks. - The automatic detection of token structures and invariants using SAT checking -- Maximizing the Conditional Expected Reward for Reaching the Goal. -ARES: Adaptive Receding-Horizon Synthesis of Optimal Plans. - FlyFast: A Mean Field Model Checker. - ERODE: A Tool for the Evaluation and Reduction of Ordinary Differential Equations -- SV COMP -- Software Verification with Validation of Results (Report on SV-COMP 2017) -- AProVE: Proving and Disproving Termination of Memory-Manipulating C Programs (Competition Contribution) -- CPA-BAM-BnB: Block-Abstraction Memoization and Region-based Memory Models for Predicate Abstractions (Competition Contribution) -- DepthK: A k-Induction Verifier Based on Invariant Inference for C Programs (Competition Contribution) -- Forester: From Heap Shapes to Automata Predicates (Competition Contribution) -- HipTNT+: A Termination and Non-termination Analyzer by Second-order Abduction (Competition Contribution) -- Lazy-CSeq 2.0: Combining Lazy Sequentialization with Abstract Interpretation (Competition Contribution) -- Skink: Static Analysis of LLVM Intermediate Representation (Competition contribution) -- Symbiotic 4: Beyond Reachability (Competition Contribution) -- Optimizing and Caching SMT Queries in SymDIVINE (Competition Contribution) -- Ultimate Automizer with an On-demand Construction of Floyd-Hoare Automata (Competition Contribution) -- Ultimate Taipan: Trace Abstraction and Abstract Interpretation (Competition Contribution) -- VeriAbs : Verification by Abstraction (Competition Contribution) .

Sommario/riassunto

The two-book set LNCS 10205 + 10206 constitutes the proceedings of the 23rd International Conference on Tools and Algorithms for the Construction and Analysis of Systems, TACAS 2017, which took place in Uppsala, Sweden in April 2017, held as Part of the European Joint Conferences on Theory and Practice of Software, ETAPS 2017. The 48 full papers, 4 tool demonstration papers, and 12 software competition papers presented in these volumes were carefully reviewed and selected from 181 submissions to TACAS and 32 submissions to the software competition. They were organized in topical sections named: verification techniques; learning; synthesis; automata; concurrency and bisimulation; hybrid systems; security; run-time verification and logic; quantitative systems; SAT and SMT; and SV COMP. .
