1.	Record Nr.	UNINA9910484587903321
	Titolo	Tools and Algorithms for the Construction and Analysis of Systems : 22nd International Conference, TACAS 2016, Held as Part of the European Joint Conferences on Theory and Practice of Software, ETAPS 2016, Eindhoven, The Netherlands, April 2-8, 2016, Proceedings / / edited by Marsha Chechik, Jean-François Raskin
	Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2016
	ISBN	3-662-49674-7
	Edizione	[1st ed. 2016.]
	Descrizione fisica	1 online resource (XIX, 961 p. 220 illus.)
	Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 9636
	Disciplina	004.21
	Soggetti	Computer science Machine theory Compilers (Computer programs) Software engineering Computer Science Logic and Foundations of Programming Formal Languages and Automata Theory Compilers and Interpreters Software Engineering Theory of Computation
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Bibliographic Level Mode of Issuance: Monograph
	Nota di bibliografia	Includes bibliographic references and index.
	Nota di contenuto	Robots at the Edge of the Cloud -- Finding Recurrent Sets with Backward Analysis and Trace Partitioning -- Tactics for the Dafny Program Verifier -- Synthesizing Ranking Functions from Bits and Pieces -- Abstraction Refinement and Antichains for Trace Inclusion of Infinite State Systems -- Probabilistic and Stochastic Systems Efficient Syntax-driven Lumping of Differential Equations -- Faster Statistical Model Checking for Unbounded Temporal Properties -- Safety-constrained Reinforcement Learning for MDPs -- Safety Verification of Continuous-Space Pure Jump Markov Processes -- Abstract Learning Frameworks for Synthesis -- Synthesizing Piece-wise Functions by Learning Classifiers -- An Automaton Learning Approach to Solving

Safety Games over Infinite Graphs -- Uncertainty Propagation using Probabilistic Affine Forms and Concentration of Measure Inequalities -- Online and Compositional Learning of Controllers with Application to Floor Heating -- Deductive Proofs of Almost Sure Persistence and Recurrence Properties -- Probabilistic CTL* : The Deductive Way -- Parametric Runtime Verification of C Programs -- Coqoon: an IDE for interactive proof development in Coq -- Multi-core symbolic bisimulation minimization -- Advances in Symbolic Probabilistic Model Checking with PRISM -- PRISM-PSY: Precise GPU-Accelerated Parameter Synthesis for Stochastic Systems -- T2: Temporal Property Verification -- RTD-Finder: A Tool for Compositional Verification of Real-Time Component-based Systems -- TcT: Tyrolean Complexity Tool -- Integrated Environment for Diagnosing Verification Errors -- JDart: A Dynamic Symbolic Analysis Framework -- Diagnostic Information for Control-Flow Analysis of Workflow Graphs -- Approaching the Coverability Problem Continuously -- On Atomicity in Presence of Non-atomic Writes -- Formalizing and Checking Thread Refinement for Data-Race-Free Execution Models -- The xSAP Safety Analysis Platform -- FACT: A Probabilistic Model Checker for Formal Verification with Confidence Intervals -- PrDK: Protocol Programming with Automata -- DLC: Compiling a Concurrent System Formal Specification to a Distributed Implementation -- PRISM-games 2.0: A Tool for Multi-Objective Strategy Synthesis for Stochastic Games -- Cerberus: Automated Synthesis of Enforcement Mechanisms for Security-sensitive Business Processes -- Developing & Debugging Proof Strategies by Tinkering -- v2c - A Verilog to C Translator Tool -- Parameterized Compositional Model Checking -- An O(m log n) Algorithm for Stuttering Equivalence and Branching Bisimulation -- Interpolants in Nonlinear Theories over the Reals -- PTIME Computation of Transitive Closures of Octagonal Relations -- Verification of Linear Controller Software -- Partial Order Reduction for Event-driven Multi-threaded Programs -- Acceleration in Multi-Pushdown Systems -- Reduction of Nondeterministic Tree Automata -- Online Timed Pattern Matching using Derivatives -- Hybridization based CEGAR for Hybrid Automata with Affine Dynamics -- Complementing Semi-deterministic Buechi Automata -- Reasoning About Information Flow Security of Separation Kernels with Channel-based Communication -- Some Complexity Results for Stateful Network Verification -- Characteristic Formulae for Session Types -- Bit-Vector Optimization -- Runtime Monitoring with Union-Find Structures -- Competition on Software Verification: SV-COMP -- Reliable and Reproducible Competition Results with BenchExec and Witnesses (Report on SV-COMP 2016).

Sommario/riassunto	This book constitutes the proceedings of the 22nd International Conference on Tools and Algorithms for the Construction and Analysis of Systems, TACAS 2016, which took place in Eindhoven, The Netherlands, in April 2016, held as Part of the European Joint Conferences on Theory and Practice of Software, ETAPS 2016. The 44 full papers presented in this volume were carefully reviewed and selected from 175 submissions. They were organized in topical sections named: abstraction and verification; probabilistic and stochastic systems; synthesis; tool papers; concurrency; tool demos; languages and automata; security; optimization; and competition on software verification – SV-COMP.