

1. Record Nr.	UNISA996465971103316
Titolo	Tools and Algorithms for the Construction and Analysis of Systems [[electronic resource]] : 11th International Conference, TACAS 2005, Held as Part of the Joint European Conference on Theory and Practice of Software, ETAPS 2005, Edinburgh, UK, April 4-8, 2004, Proceedings / / edited by Nicolas Halbwachs, Lenore Zuck
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2005
Edizione	[1st ed. 2005.]
Descrizione fisica	1 online resource (XVIII, 590 p.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 3440
Disciplina	005.1
Soggetti	Software engineering Computer science Computer networks Algorithms Software Engineering Computer Science Logic and Foundations of Programming Computer Communication Networks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Paper -- Applications of Craig Interpolants in Model Checking -- Regular Model-Checking -- Verifying Programs with Dynamic 1- Selector-Linked Structures in Regular Model Checking -- Simulation- Based Iteration of Tree Transducers -- Using Language Inference to Verify Omega-Regular Properties -- Infinite State Systems -- On-the- Fly Reachability and Cycle Detection for Recursive State Machines -- Empirically Efficient Verification for a Class of Infinite-State Systems -- Context-Bounded Model Checking of Concurrent Software -- A Generic Theorem Prover of CSP Refinement -- Abstract Interpretation -- Separating Fairness and Well-Foundedness for the Analysis of Fair Discrete Systems -- An Abstract Interpretation-Based Refinement Algorithm for Strong Preservation -- Dependent Types for Program Understanding -- Automata and Logics -- A Note on On-the-Fly

Verification Algorithms -- Truly On-the-Fly LTL Model Checking --
Complementation Constructions for Nondeterministic Automata on
Infinite Words -- Using BDDs to Decide CTL -- Probabilistic Systems,
Probabilistic Model-Checking -- Model Checking Infinite-State Markov
Chains -- Algorithmic Verification of Recursive Probabilistic State
Machines -- Monte Carlo Model Checking -- Satisfiability -- Efficient
Conflict Analysis for Finding All Satisfying Assignments of a Boolean
Circuit -- Bounded Validity Checking of Interval Duration Logic -- An
Incremental and Layered Procedure for the Satisfiability of Linear
Arithmetic Logic -- A Two-Tier Technique for Supporting Quantifiers in
a Lazily Proof-Explicating Theorem Prover -- Testing -- Symbolic Test
Selection Based on Approximate Analysis -- Symstra: A Framework for
Generating Object-Oriented Unit Tests Using Symbolic Execution --
Abstraction and Reduction -- Dynamic Symmetry Reduction --
Localization and Register Sharing for Predicate Abstraction -- On Some
Transformation Invariants Under Retiming and Resynthesis --
Specification, Program Synthesis -- Compositional Message Sequence
Charts (CMSCs) Are Better to Implement Than MSCs -- Temporal Logic
for Scenario-Based Specifications -- Mining Temporal Specifications for
Error Detection -- A New Algorithm for Strategy Synthesis in LTL
Games -- Model-Checking -- Shortest Counterexamples for Symbolic
Model Checking of LTL with Past -- Snapshot Verification -- Time-
Efficient Model Checking with Magnetic Disk -- Tool Presentations --
jMoped: A Java Bytecode Checker Based on Moped -- Java-MOP: A
Monitoring Oriented Programming Environment for Java -- JML-
Testing-Tools: A Symbolic Animator for JML Specifications Using CLP --
jETI: A Tool for Remote Tool Integration -- FocusCheck: A Tool for
Model Checking and Debugging Sequential C Programs -- SATABS:
SAT-Based Predicate Abstraction for ANSI-C -- DiVer: SAT-Based
Model Checking Platform for Verifying Large Scale Systems --
BISIMULATOR: A Modular Tool for On-the-Fly Equivalence Checking.

Sommario/riassunto

ETAPS 2005 was the eighth instance of the European Joint Conferences on Theory and Practice of Software. ETAPS is an annual federated conference that was established in 1998 by combining a number of existing and new conferences. This year it comprised 7 conferences (CC, ESOP, FASE, FOSSACS, TACAS), 17 satellite workshops (AVIS, BYTECODE, CEES, CLASE, CMSB, COCV, FAC, FESCA, FINCO, GCW-DSE, GLPL, LDTA, QAPL, SC, SLAP, TGC, UITP), seven invited lectures (not including those that were specific to the satellite events), and several tutorials. We received over 550 submissions to the 7 conferences this year, giving acceptance rates below 30% for each one. Congratulations to all the authors who made it to the final program! I hope that most of the other authors still found a way of participating in this exciting event and I hope you will continue submitting. The events that comprise ETAPS address various aspects of the system development process, including specification, design, implementation, analysis and improvement. The languages, methodologies and tools which support these activities are all well within its scope. Different blends of theory and practice are represented, with an inclination towards theory with a practical motivation on the one hand and soundly based practice on the other. Many of the issues involved in software design apply to systems in general, including hardware systems, and the emphasis on software is not intended to be exclusive.
