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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.

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## 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.

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