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	Nota di contenuto	Invited Contribution -- On the Construction of Automata from Linear Arithmetic Constraints -- Software and Formal Methods Tools -- An Extensible Type System for Component-Based Design -- Proof General: A Generic Tool for Proof Development -- ViewPoint-Oriented Software Development: Tool Support for Integrating Multiple Perspectives by Distributed Graph Transformation -- Formal Methods Tools -- Consistent Integration of Formal Methods -- An Architecture for Interactive Program Provers -- The PROSPER Toolkit -- CASL: From Semantics to Tools -- Timed and Hybrid Systems -- On the Construction of Live Timed Systems -- On Memory-Block Traversal

Problems in Model-Checking Timed Systems -- Symbolic Model Checking for Rectangular Hybrid Systems -- Efficient Data Structure for Fully Symbolic Verification of Real-Time Software Systems -- Infinite and Parameterized Systems -- Verification of Parameterized Systems Using Logic Program Transformations -- Abstracting WS1S Systems to Verify Parameterized Networks -- FMona: A Tool for Expressing Validation Techniques over Infinite State Systems -- Transitive Closures of Regular Relations for Verifying Infinite-State Systems -- Diagnostic and Test Generation -- Using Static Analysis to Improve Automatic Test Generation -- Efficient Diagnostic Generation for Boolean Equation Systems -- Efficient Model-Checking -- Compositional State Space Generation with Partial Order Reductions for Asynchronous Communicating Systems -- Checking for CFFD-Preorder with Tester Processes -- Fair Bisimulation -- Integrating Low Level Symmetries into Reachability Analysis -- Model-Checking Tools -- Model Checking Support for the ASM High-Level Language -- A Markov Chain Model Checker -- Model Checking SDL with Spin -- Salsa: Combining Constraint Solvers with BDDs for Automatic Invariant Checking -- Symbolic Model-Checking -- Symbolic Model Checking of Probabilistic Processes Using MTBDDs and the Kronecker Representation -- Symbolic Reachability Analysis Based on SAT-Solvers -- Symbolic Representation of Upward-Closed Sets -- BDD vs. Constraint-Based Model Checking: An Experimental Evaluation for Asynchronous Concurrent Systems -- Visual Tools -- Tool-Based Specification of Visual Languages and Graphic Editors -- VIP: A Visual Editor and Compiler for v-Promela -- Verification of Critical Systems -- A Comparison of Two Verification Methods for Speculative Instruction Execution -- Partial Order Reductions for Security Protocol Verification -- Model Checking Security Protocols Using a Logic of Belief -- A Formal Specification and Validation of a Critical System in Presence of Byzantine Errors.

Sommario/riassunto	This book constitutes the refereed proceedings of the 6th International Conference on Tools and Algorithms for the Construction and Analysis of Systems, TACAS 2000, held as part of ETAPS 2000 in Berlin, Germany, in March/April 2000. The 33 revised full papers presented together with one invited paper and two short tool descriptions were carefully reviewed and selected from a total of 107 submissions. The papers are organized in topical sections on software and formal methods, formal methods, timed and hybrid systems, infinite and parameterized systems, diagnostic and test generation, efficient model checking, model-checking tools, symbolic model checking, visual tools, and verification of critical systems.