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Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 575
Disciplina	004.0151
Soggetti	Computers
	Software engineering
	Architecture, Computer
	Computer logic
	Mathematical logic
	Special purpose computers
	Software Engineering/Programming and Operating Systems
	Computer System Implementation
	Logics and Meanings of Programs
	Mathematical Logic and Formal Languages
	Special Purpose and Application-Based Systems
Lingua di pubblicazione	Inglese
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Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Taming infinite state spaces Silence is golden: Branching bisimilarity is decidable for context-free processes Computing distinguishing formulas for branching bisimulation Compositional checking of satisfaction An action based framework for verifying logical and behavioural properties of concurrent systems A linear-time model- checking algorithm for the alternation-free modal mu-calculus Automatic temporal verification of buffer systems Mechanically checked proofs of kernel specifications A top down approach to the formal specification of SCI cache coherence Integer programming in

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the analysis of concurrent systems -- The lotos model of a fault protected system and its verification using a petri net based approach -- Error diagnosis in finite communicating systems -- Temporal precondition verification of design transformations -- PAM: A process algebra manipulator -- The Concurrency Workbench with priorities --A proof assistant for PSF -- Avoiding state explosion by composition of minimal covering graphs -- "On the fly" verification of behavioural equivalences and preorders -- Bounded-memory algorithms for verification on-the-fly -- Generating BDDs for symbolic model checking in CCS -- Vectorized symbolic model checking of computation tree logic for sequential machine verification -- Functional extension of symbolic model checking -- An automated proof technique for finite-state machine equivalence -- From data structure to process structure -- Checking for language inclusion using simulation preorders -- A semantic driven method to check the fineteness of CCS processes -- Using the HOL prove assistant for proving the correctness of term rewriting rules reducing terms of sequential behavior -- Mechanizing a proof by induction of process algebra specifications in higher order logic -- A two-level formal verification methodology using HOL and COSMOS -- Efficient algorithms for verification of equivalences for probabilistic processes -- Partial-order model checking: A guide for the perplexed -- Using partial orders for the efficient verification of deadlock freedom and safety properties -- Complexity results for POMSET languages --Mechanically verifying safety and liveness properties of delay insensitive circuits -- Automating most parts of hardware proofs in HOL -- An overview and synthesis on timed process algebras --Minimum and maximum delay problems in realtime systems -- Formal verification of speed-dependent asynchronous circuits using symbolic model checking of Branching Time Regular Temporal Logic -- Verifying properties of HMS machine specifications of real-time systems -- A linear time process algebra -- Deciding properties of regular real timed processes -- An algebra of Boolean processes -- Comparing generic state machines -- An automata theoretic approach to Temporal Logic. This volume contains the proceedings of the third International Workshop on Computer Aided Verification, CAV '91, held in Aalborg, Denmark, July 1-4, 1991. The objective of this series of workshops is to bring together researchers and practitioners interested in the development and use of methods, tools and theories for automatic verification of (finite) state systems. The workshop provides a unique opportunity for comparing the numerous verification methods and associated verification tools, and the extent to which they may be utilized in application design. The emphasis is not only on new research results but also on the application of existing results to real verification problems. The papers in the volume areorganized into sections on equivalence checking, model checking, applications, tools for process algebras, the state explosion problem, symbolic model checking, verification and transformation techniques, higher order logic, partial order approaches, hardware verification, timed specification and verification, and automata.

Sommario/riassunto