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Descrizione fisica	1 online resource (XIV, 486 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 2280
Disciplina	004.2/1
Soggetti	Computers Computer logic Software engineering Computer networks Algorithms Theory of Computation Logics and Meanings of Programs Software Engineering Computer Communication Networks Algorithm Analysis and Problem Complexity
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 at the end of each chapters and index.
Nota di contenuto	Invited Contributions -- Software Construction and Analysis Tools for Future Space Missions -- Alloy: A New Technology for Software Modelling -- Real-Time and Probabilistic Systems -- Improving the Verification of Timed Systems Using Influence Information -- Digitisation and Full Abstraction for Dense-Time Model Checking -- Probabilistic Symbolic Model Checking with PRISM: A Hybrid Approach -- Scheduling -- Timed Automata with Asynchronous Processes: Schedulability and Decidability -- Validating Timing Constraints of Dependent Jobs with Variable Execution Times in Distributed Real-Time

Systems -- An Analysis of Zero-Clairvoyant Scheduling -- Preemptive Job-Shop Scheduling Using Stopwatch Automata -- Miscellaneous -- Explicit Modeling of Influences, and of Their Absence, in Distributed Systems -- A Functional Semantics of Attribute Grammars -- Software Verification -- Relative Completeness of Abstraction Refinement for Software Model Checking -- Towards the Automated Verification of Multithreaded Java Programs -- CLPS-B—A Constraint Solver for B -- Formal Verification of Functional Properties of an SCR-Style Software Requirements Specification Using PVS -- Infinite-State and Parametric Systems -- Beyond Parameterized Verification -- Resource-Constrained Model Checking of Recursive Programs -- Model Checking Large-Scale and Parameterized Resource Allocation Systems -- Model Checking: Logics and Algorithms -- Exploring Very Large State Spaces Using Genetic Algorithms -- Local Model-Checking of Modal Mu-Calculus on Acyclic Labeled Transition Systems -- The ForSpec Temporal Logic: A New Temporal Property-Specification Language -- Fine-Grain Conjunction Scheduling for Symbolic Reachability Analysis -- Model Checking and Testing -- A Temporal Logic Based Theory of Test Coverage and Generation -- Synthesizing Monitors for Safety Properties -- Adaptive Model Checking -- Partial-Order and Simulation Techniques -- Parallelisation of the Petri Net Unfolding Algorithm -- Black Box Unfolding with Local First Search -- Applicability of Fair Simulation -- Simulation as Coarsest Partition Problem -- Debugging with Model Checking -- Temporal Debugging for Concurrent Systems -- Fate and FreeWill in Error Traces -- Tool Papers -- TIMES b— A Tool for Modelling and Implementation of Embedded Systems -- Compositional Verification Using SVL Scripts -- STG: A Symbolic Test Generation Tool -- Real-Time Systems Design with PEP.

Sommario/riassunto

ETAPS 2002 was the 7th 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 5 conferences (FOSSACS, FASE, ESOP, CC, TACAS), 13 satellite workshops (ACL2, AGT, CMCS, COCV, DCC, INT, LDTA, SC, SFEDL, SLAP, SPIN, TPTS, and VISS), 8 invited lectures (not including those specific to the satellite events), and several tutorials. 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 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.
