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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Contribution -- Modeling for Mere Mortals -- Real-Time -- Scheduling System Verification -- A Period Assignment Algorithm for Real-Time System Design -- Analyzing Stochastic Fixed-Priority Real-Time Systems -- Timed Diagnostics for Reachability Properties -- Case Studies -- Fighting Livelock in the i-Protocol: A Comparative Study of Verification Tools -- Proving the Soundness of a Java Bytecode Verifier Specification in Isabelle/HOL -- Automated Fast-Track Reconfiguration of Group Communication Systems -- Specifications and Proofs for Ensemble Layers -- Compositionality and Abstraction -- An Automated Analysis of Ping-Pong Interactions in E-Mail Services -- Automatic Verification of Cryptographic Protocols through Compositional Analysis Techniques -- Verification of Hierarchical State/Event Systems Using Reusability and Compositionality -- On Proving Safety Properties by Integrating Static Analysis, Theorem Proving and Abstraction -- Symbolic Analysis -- Symbolic Model Checking without BDDs -- Symbolic Verification of Lossy Channel Systems: Application to the Bounded Retransmission Protocol -- Model Checking in CLP -- Using Logic Programs with Stable Model Semantics to Solve Deadlock and Reachability Problems for 1-Safe Petri Nets -- Process Algebra -- Finite State Verification for the Asynchronous π -Calculus -- Process Algebra

in PVS -- On the Benefits of Using the Up-To Techniques for Bisimulation Verification -- Computing Strong/Weak Bisimulation Equivalences and Observation Congruence for Value-Passing Processes -- Frameworks for System Construction and Analysis -- Hardware Testing Using a Communication Protocol Conformance Testing Tool -- A Light-Weight Framework for Hardware Verification -- An Easily Extensible Toolset for Tabular Mathematical Expressions -- From DFA-Frameworks to DFA-Generators: A Unifying Multiparadigm Approach -- Tool Descriptions -- A Theorem Prover-Based Analysis Tool for Object-Oriented Databases -- DYANA: An Environment for Embedded System Design and Analysis -- Path Exploration Tool -- Modular State Level Analysis of Distributed Systems Techniques and Tool Support -- Position Paper -- Some Issues in the Software Engineering of Verification Tools -- ETAPS Tool Demonstration -- The ETI Online Service in Action.

Sommario/riassunto

ETAPS'99 is the second 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 comprises five conferences (FOSSACS, FASE, ESOP, CC, TACAS), four satellite workshops (CMCS, AS, WAGA, CoFI), seven invited lectures, two invited tutorials, and six contributed 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.
