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Altri autori (Persone)	BreitmanKarin CavalcantiAna
Disciplina	004n/a
Soggetti	Software engineering Compilers (Computer programs) Computer programming Computer science Machine theory Software Engineering Compilers and Interpreters Programming Techniques Models of Computation Formal Languages and Automata Theory
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Papers -- Seamless Model Driven Systems Engineering Based on Formal Models -- Compositional Verification of Input-Output Conformance via CSP Refinement Checking -- Testing I -- Symbolic Query Exploration -- Event Listener Analysis and Symbolic Execution for Testing GUI Applications -- An Empirical Study of Structural Constraint Solving Techniques -- Protocols -- Improving Automatic Verification of Security Protocols with XOR -- Modeling and Verification

of Privacy Enhancing Protocols -- Role-Based Symmetry Reduction of Fault-Tolerant Distributed Protocols with Language Support -- Testing II -- Implementing and Applying the Stocks-Carrington Framework for Model-Based Testing -- A Statistical Approach to Test Stochastic and Probabilistic Systems -- Qualitative Action Systems -- Verification -- RAFFS: Model Checking a Robust Abstract Flash File Store -- European Train Control System: A Case Study in Formal Verification -- Development of Security Software: A High Assurance Methodology -- Model Checking I -- Bounded Semantics of CTL and SAT-Based Verification -- Graded-CTL: Satisfiability and Symbolic Model Checking -- Approximate Model Checking of PCTL Involving Unbounded Path Properties -- Object-Orientation -- A Graph-Based Operational Semantics of OO Programs -- Modeling and Analysis of Thread-Pools in an Industrial Communication Platform -- A Verification System for Distributed Objects with Asynchronous Method Calls -- Model checking II -- A Time-Optimal On-the-Fly Parallel Algorithm for Model Checking of Weak LTL Properties -- Scalable Multi-core Model Checking Fairness Enhanced Systems -- Combining Static Model Checking with Dynamic Enforcement Using the Statecall Policy Language -- Event-B -- Supporting Reuse of Event-B Developments through Generic Instantiation -- A Lazy Unbounded Model Checker for Event-B -- Proof Assisted Model Checking for B -- Compilation -- Machine-Checked Sequencer for Critical Embedded Code Generator -- Implementing a Direct Method for Certificate Translation -- Process Algebra -- Algorithmic Verification with Multiple and Nested Parameters -- Verifying Stateful Timed CSP Using Implicit Clocks and Zone Abstraction -- Refinement -- Modal Systems: Specification, Refinement and Realisation -- Refinement-Preserving Co-evolution -- Algebraic Specifications -- Circular Coinduction with Special Contexts -- The VSE Refinement Method in Hets -- Real-Time Systems -- A Compositional Approach on Modal Specifications for Timed Systems -- An Efficient Translation of Timed-Arc Petri Nets to Networks of Timed Automata -- Verifying Ptolemy II Discrete-Event Models Using Real-Time Maude -- Specifying and Verifying Business Processes Using PPML.

Sommario/riassunto

This book constitutes the refereed proceedings of the 11th International Conference on Formal Engineering Methods, ICFEM 2009, held in Rio de Janeiro, Brazil, December 2009. The 36 revised full papers together with two invited talks presented were carefully reviewed and selected from 121 submissions. The papers address all current issues in formal methods and their applications in software engineering. They are organized in topical sections on Testing, Protocols, verification, model checking, object-orientation, event-b, compilation, process algebra, refinement, algebraic specifications and real-time systems.
