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Disciplina	004.01/51
Soggetti	Software engineering Computer logic Mathematical logic Programming languages (Electronic computers) Management information systems Computer science Software Engineering Logics and Meanings of Programs Mathematical Logic and Formal Languages Programming Languages, Compilers, Interpreters Management of Computing and Information Systems Computer Science, general
Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references and author index.
Nota di contenuto	The Versatile Synchronous Observer.-Ten Years of Automated Code Analysis at Microsoft.-Model Checking Propositional Deontic Temporal Logic via a mu-calculus Characterization.-An approach using the B method to formal verification of PLC programs in an Industrial Setting.-Palytoxin Inhibits the Sodium-Potassium Pump -- An Investigation of an Electrophysiological Model Using Probabilistic Model Checking.-BETA: A B Based Testing Approach.-A Process Algebra Based Strategy for Generating Test Vectors from SCR Specifications.-Specification Patterns for Properties over Reachable States of Graph Grammars.-

Refinement, Compositionality, and Model-Driven Engineering --  
Identifying hardware failures systematically -- Investigating Time  
Properties of Interrupt-Driven Programs -- Specifying and Verifying  
Declarative Fluent Temporal Logic Properties of Workflows --  
Composition of Model Transformations: A Categorical Framework --  
Verification Rules for Exception Handling in Eiffel -- Sound reduction of  
persistent sets for deadlock detection in MPI applications --  
Alternating-time Temporal Logic in the Calculus of (Co)Inductive Co.

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Sommario/riassunto

This book constitutes the refereed proceedings of the 15th Brazilian Symposium on Formal Methods, SBMF 2012, held in Natal, Brazil, in September 2012; co-located with CBSoft 2012, the Third Brazilian Conference on Software: Theory and Practice. The 14 revised full papers presented together with 2 keynotes were carefully reviewed and selected from 29 submissions. The papers presented cover a broad range of foundational and methodological issues in formal methods for the design and analysis of software and hardware systems as well as applications in various domains.

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