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	Soggetti	Software engineering Programming languages (Electronic computers) Computer logic Software Engineering/Programming and Operating Systems Programming Languages, Compilers, Interpreters Logics and Meanings of Programs Software Engineering
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	Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
	Nota di contenuto	Papers -- Symmetric Spin -- Using Garbage Collection in Model Checking -- Model Checking Based on Simultaneous Reachability Analysis -- Testing Spin's LTL Formula Conversion into Büchi Automata with Randomly Generated Input -- Verification and Optimization of a PLC Control Schedule -- Modeling the ASCB-D Synchronization Algorithm with SPIN: A Case Study -- Bebop: A Symbolic Model Checker for Boolean Programs -- Logic Verification of ANSI-C Code with SPIN -- Interaction Abstraction for Compositional Finite State Systems -- Correctness by Construction: Towards Verification in Hierarchical System Development -- Linking ST e P with SPIN -- Abstraction of Communication Channels in Promela: A Case Study -- A Language Framework for Expressing Checkable Properties of Dynamic Software -- Model-Checking Multi-threaded Distributed Java Programs -- Using

Runtime Analysis to Guide Model Checking of Java Programs -- Communication Topology Analysis for Concurrent Programs -- Low-Fat Recipes for SPIN -- Tool Tutorials -- Tutorial on FDR and Its Applications -- The Temporal Rover and the ATG Rover -- Runtime Checking of Multithreaded Applications with Visual Threads.

| Sommario/riassunto | The SPIN workshop is a forum for researchers interested in the subject of automata-based, explicit-state model checking technologies for the analysis and veri?cation of asynchronous concurrent and distributed systems. The SPIN - del checker (http://netlib.bell-labs.com/netlib/spin/whatispin.html), developed by Gerard Holzmann, is one of the best known systems of this kind, and has attracted a large user community. This can likely be attributed to its e?cient state exploration algorithms. The fact that SPIN's modeling language, Promela, resembles a programming language has probably also contributed to its success. Traditionally, the SPIN workshops present papers on extensions and uses of SPIN. As an experiment, this year's workshop was broadened to have a slightly wider focus than previous workshops in that papers on software veri?cation were encouraged. Consequently, a small collection of papers describe attempts to analyze and verify programs written in conventional programming languages. Solutions include translations from source code to Promela, as well as specially designed model checkers that accept source code. We believe that this is an - teresting research direction for the formal methods community, and that it will result in a new set of challenges and solutions. Of course, abstraction becomes the key solution to deal with very large state spaces. However, we also see - tential for integrating model checking with techniques such as static program analysis and testing. Papers on these issues have therefore been included in the proceedings. |