1.	Record Nr.	UNISA996465400103316
	Titolo	Model Checking Software [[electronic resource]] : 16th International SPIN Workshop, Grenoble, France, June 26-28, 2009, Proceedings / / edited by Corina S Pasareanu
	Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2009
	ISBN	3-642-02652-4
	Edizione	[1st ed. 2009.]
	Descrizione fisica	1 online resource (X, 297 p.)
	Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 5578
	Classificazione	DAT 325f SS 4800
	Disciplina	005.1
	Soggetti	Software engineering Compilers (Computer programs) Computer science Software Engineering Compilers and Interpreters Computer Science Logic and Foundations of Programming
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	This volume contains the proceedings of the 16th International SPIN Workshop on Model Checking of Software (SPIN 2009), that was held at the Grenoble World Trade Center, in Grenoble France, June 26-28, 2009.--Pref.
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Invited Contributions -- Software Model Checking Improving Security of a Billion Computers -- On Quantitative Software Verification -- The Quest for Correctness-Beyond a Posteriori Verification -- Who Really Cares If the Program Crashes? -- Regular Papers -- Tool Presentation: Teaching Concurrency and Model Checking -- Fast, All-Purpose State Storage -- Efficient Probabilistic Model Checking on General Purpose Graphics Processors -- Improving Non-Progress Cycle Checks -- Reduction of Verification Conditions for Concurrent System Using Mutually Atomic Transactions -- Probabilistic Reachability for Parametric Markov Models -- Extrapolation-Based Path Invariants for Abstraction Refinement of Fifo Systems -- A Decision Procedure for Detecting Atomicity Violations for Communicating Processes with Locks

-- Eclipse Plug-In for Spin and st2msc Tools-Tool Presentation -- Symbolic Analysis via Semantic Reinterpretation -- EMMA: Explicit Model Checking Manager (Tool Presentation) -- Efficient Testing of Concurrent Programs with Abstraction-Guided Symbolic Execution -- Subsumer-First: Steering Symbolic Reachability Analysis -- Identifying Modeling Errors in Signatures by Model Checking -- Towards Verifying Correctness of Wireless Sensor Network Applications Using Insense and Spin -- Verification of GALS Systems by Combining Synchronous Languages and Process Calculi -- Experience with Model Checking Linearizability -- Automatic Discovery of Transition Symmetry in Multithreaded Programs Using Dynamic Analysis.

Sommario/riassunto	This book constitutes the refereed proceedings of the 16th International SPIN workshop on Model Checking Software, SPIN 2009, held in Grenoble, France, in June 2009. The 15 revised full papers presented together with 3 tool papers and 4 invited talks were carefully reviewed and selected from 41 submissions. The papers cover theoretical and algorithmic foundations as well as tools for software model checking by addressing theoretical advances and empirical evaluations related to state-space and path exploration techniques, as implemented in software verification tools.