

1. Record Nr.	UNINA9910484726903321
Titolo	Formal Methods for Industrial Critical Systems : 13th International Workshop, FMICS 2008, L'Aquila, Italy, September 15-16, 2008, Revised Selected Papers // edited by Darren Cofer, Alessandro Fantechi
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2009
ISBN	1-282-33177-9 9786612331770 3-642-03240-0
Edizione	[1st ed. 2009.]
Descrizione fisica	1 online resource (241 p.)
Collana	Programming and Software Engineering, , 2945-9168 ; ; 5596
Classificazione	DAT 260f DAT 343f SS 4800
Disciplina	004.0151
Soggetti	Computer networks Software engineering Compilers (Computer programs) Computer science Computers, Special purpose Computer Communication Networks Software Engineering Compilers and Interpreters Computer Science Logic and Foundations of Programming Special Purpose and Application-Based Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Presentations -- Formal Methods for Critical Systems -- Model-Based Verification of Automotive Control Software -- Contract-Based Analysis of Automotive and Avionics Applications: The SPEEDS Approach -- Panel -- Panel Discussion on Formal Methods in Commercial Software Development Tools -- Research Papers -- LETO - A Lustre-Based Test Oracle for Airbus Critical Systems -- Extending Structural Test Coverage Criteria for Lustre Programs with Multi-clock

Operators -- Fighting State Space Explosion: Review and Evaluation --
Local Quantitative LTL Model Checking -- Efficient Symbolic Model
Checking for Process Algebras -- Reentrant Readers-Writers: A Case
Study Combining Model Checking with Theorem Proving -- Using
CSP//B Components: Application to a Platoon of Vehicles -- Formal
Verification of the Implementability of Timing Requirements --
Dynamic Event-Based Runtime Monitoring of Real-Time and Contextual
Properties -- Can Flash Memory Help in Model Checking? -- From
Informal Requirements to Property-Driven Formal Validation --
Automated Certification of Non-Interference in Rewriting Logic --
Formal Verification of Safety Functions by Reinterpretation of
Functional Block Based Specifications -- Using Datalog and Boolean
Equation Systems for Program Analysis.

Sommario/riassunto

This book constitutes the thoroughly refereed post-workshop proceedings of the 13th International Workshop on Formal Methods for Industrial Critical Systems, FMICS 2008, held in L'Aquila, Italy, in September 2008 - colocated with ASE 2008, the 23rd International Conference on Automated Software Engineering. The 14 revised full papers presented together with the abstracts of 3 invited presentations and 2 short presentations introducing the panel were carefully selected from 36 initial submissions. The papers strive to promote research and development for the improvement of formal methods and tools for industrial applications. They cover topics such as model checking, testing, software verification, real-time performance, and industrial case studies.
