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Collana Programming and Software Engineering;; 5825

Disciplina 005.131

Soggetti Software engineering

Computer logic

Programming languages (Electronic computers)

Special purpose computers

Software Engineering/Programming and Operating Systems

Software Engineering

Logics and Meanings of Programs

Programming Languages, Compilers, Interpreters Special Purpose and Application-Based Systems

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Selected conference papers.

Nota di bibliografia Includes bibliographical references and index.

Nota di contenuto Invited Papers -- Attacking Large Industrial Code with Bi-abductive

Inference -- On a Uniform Framework for the Definition of Stochastic Process Languages -- Applying a Formal Method in Industry: A 15-Year Trajectory -- What's in Common between Test, Model Checking, and Decision Procedures? -- Contributed Papers -- Verifying Cryptographic Software Correctness with Respect to Reference Implementations -- Towards an Industrial Use of FLUCTUAT on Safety-Critical Avionics Software -- Dynamic State Space Partitioning for External Memory Model Checking -- Compositional Verification of a Communication Protocol for a Remotely Operated Vehicle -- Modeling Concurrent Systems with Shared Resources -- Platform-Specific Restrictions on Concurrency in Model Checking of Java Programs -- Formal Analysis of

Non-determinism in Verilog Cell Library Simulation Models -Preemption Abstraction -- A Rigorous Methodology for Composing
Services -- A Certified Implementation on Top of the Java Virtual
Machine -- Selected Posters -- Formal Development for Railway
Signaling Using Commercial Tools -- Integrated Formal Approach for
Qualified Critical Embedded Code Generator -- Visualising Event-B
Models with B-Motion Studio -- Behavioural Analysis of an I2C Linux
Driver -- Model-Based Testing of Electronic Passports -- Developing a
Decision Support Tool for Dam Management with SPIN.

## Sommario/riassunto

This book constitutes the proceedings of the 14th International Workshop on Formal Methods for Industrial Critical Systems, FMICS 2009 held in Eindhoven, The Netherlands, in November 2009. The 10 papers presented were carefully reviewed and selected from 25 submissions. The volume also contains with 4 invited papers and 6 posters. The aim of the FMICS workshop series is to provide a forum for researchers who are interested in the development and application of formal methods in industry. It also strives to promote research and development for the improvement of formal methods and tools for industrial applications.