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Altri autori (Persone)	MisraJayadev NipkowTobias <1958-> SekerinskiE <1963-> (Emil)
Disciplina	005.3
Soggetti	Software engineering Computer science Compilers (Computer programs) Computer programming Machine theory Software Engineering Computer Science Logic and Foundations of Programming Compilers and Interpreters Programming Techniques Formal Languages and Automata Theory
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Nota di contenuto	Invited Talk -- The Embedded Systems Design Challenge -- Interactive Verification -- The Mondex Challenge: Machine Checked Proofs for an Electronic Purse -- Interactive Verification of Medical Guidelines -- Certifying Airport Security Regulations Using the Focal Environment -- Proving Safety Properties of an Aircraft Landing Protocol Using I/O Automata and the PVS Theorem Prover: A Case Study -- Invited Talk -- Validating the Microsoft Hypervisor -- Formal Modelling of Systems -- Interface Input/Output Automata -- Properties of Behavioural Model Merging -- Automatic Translation from Circus to Java -- Quantitative

Refinement and Model Checking for the Analysis of Probabilistic Systems -- Real Time -- Modeling and Validating Distributed Embedded Real-Time Systems with VDM++ -- Towards Modularized Verification of Distributed Time-Triggered Systems -- Industrial Experience -- A Story About Formal Methods Adoption by a Railway Signaling Manufacturer -- Partially Introducing Formal Methods into Object-Oriented Development: Case Studies Using a Metrics-Driven Approach -- Specification Refinement -- Compositional Class Refinement in Object-Z -- A Proposal for Records in Event-B -- Pointfree Factorization of Operation Refinement -- A Formal Template Language Enabling Metaproof -- Programming Languages -- Dynamic Frames: Support for Framing, Dependencies and Sharing Without Restrictions -- Type-Safe Two-Level Data Transformation -- Algebra -- Feature Algebra -- Education -- Using Domain-Independent Problems for Introducing Formal Methods -- Formal Modelling of Systems -- Compositional Binding in Network Domains -- Formal Modeling of Communication Protocols by Graph Transformation -- Feature Specification and Static Analysis for Interaction Resolution -- A Fully General Operational Semantics for UML 2.0 SequenceDiagrams with Potential and Mandatory Choice -- Formal Aspects of Java -- Towards Automatic Exception Safety Verification -- Enforcer – Efficient Failure Injection -- Automated Boundary Test Generation from JML Specifications -- Formal Reasoning About Non-atomic Java Card Methods in Dynamic Logic -- Programming Languages -- Formal Verification of a C Compiler Front-End -- A Memory Model Sensitive Checker for C# -- Changing Programs Correctly: Refactoring with Specifications -- Mechanical Verification of Recursive Procedures Manipulating Pointers Using Separation Logic -- Model Checking -- Model-Based Variable and Transition Orderings for Efficient Symbolic Model Checking -- Exact and Approximate Strategies for Symmetry Reduction in Model Checking -- Monitoring Distributed Controllers: When an Efficient LTL Algorithm on Sequences Is Needed to Model-Check Traces -- PSL Model Checking and Run-Time Verification Via Testers -- Industry Day: Abstracts of Invited Talks -- Formal Methods for Security: Lightweight Plug-In or New Engineering Discipline -- Formal Methods in the Security Business: Exotic Flowers Thriving in an Expanding Niche -- Connector-Based Software Development: Deriving Secure Protocols -- Model-Based Security Engineering for Real -- Cost Effective Software Engineering for Security -- Formal Methods and Cryptography -- Verified Software Grand Challenge.

Sommario/riassunto

This book presents the refereed proceedings of the 14th International Symposium on Formal Methods, FM 2006, held in Hamilton, Canada, August 2006. The book presents 36 revised full papers together with 2 invited contributions and extended abstracts of 7 invited industrial presentations, organized in topical sections on interactive verification, formal modelling of systems, real time, industrial experience, specification and refinement, programming languages, algebra, formal modelling of systems, and more.