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Altri autori (Persone)	FitzgeraldJohn <1965-> HayesIan TarleckiAndrzej
Disciplina	004.13/1
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Livello bibliografico	Monografia
Note generali	"13th International Symposium of Formal Methods Europe"--Pref.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Keynote Talks -- Formal Aids for the Growth of Software Systems -- Formal Methods and Testing: Hypotheses, and Correctness Approximations -- The Natural History of Bugs: Using Formal Methods to Analyse Software Related Failures in Space Missions -- Object Orientation -- Modular Verification of Static Class Invariants -- Decoupling in Object Orientation -- Controlling Object Allocation Using Creation Guards -- Symbolic Animation of JML Specifications --

Resource Analysis and Verification -- Certified Memory Usage Analysis
-- Compositional Specification and Analysis of Cost-Based Properties
in Probabilistic Programs -- Formally Defining and Verifying
Master/Slave Speculative Parallelization -- Timing and Testing --
Systematic Implementation of Real-Time Models -- Timing Tolerances
in Safety-Critical Software -- Timed Testing with TorX -- Automatic
Verification and Conformance Testing for Validating Safety Properties
of Reactive Systems -- CSP, B and Circus -- Adding Conflict and
Confusion to CSP -- Combining CSP and B for Specification and
Property Verification -- Operational Semantics for Model Checking
Circus -- Control Law Diagrams in Circus -- Security -- Verification of
a Signature Architecture with HOL-Z -- End-to-End Integrated Security
and Performance Analysis on the DEGAS Choreographer Platform --
Formal Verification of Security Properties of Smart Card Embedded
Source Code -- Networks and Processes -- A Formal Model of
Addressing for Interoperating Networks -- An Approach to Unfolding
Asynchronous Communication Protocols -- Semantics of BPEL4WS-Like
Fault and Compensation Handling -- Abstraction, Retrenchment and
Rewriting -- On Some Galois Connection Based Abstractions for the
Mu-Calculus -- Retrenching the Purse: Finite Sequence Numbers, and
the Tower Pattern -- Strategic Term Rewriting and Its Application to a
Vdm-sl to Sql Conversion -- Scenarios and Modeling Languages --
Synthesis of Distributed Processes from Scenario-Based Specifications
-- Verifying Scenario-Based Aspect Specifications -- An MDA Approach
Towards Integrating Formal and Informal Modeling Languages -- Model
Checking -- Model-Checking of Specifications Integrating Processes,
Data and Time -- Automatic Symmetry Detection for Model Checking
Using Computational Group Theory -- On Partitioning and Symbolic
Model Checking -- Dynamic Component Substitutability Analysis --
Industry Day: Abstracts of Invited Talks -- Floating-Point Verification
-- Preliminary Results of a Case Study: Model Checking for Advanced
Automotive Applications -- Model-Based Testing in Practice -- Testing
Concurrent Object-Oriented Systems with Spec Explorer -- ASD Case
Notes: Costs and Benefits of Applying Formal Methods to Industrial
Control Software -- The Informal Nature of Systems Engineering.

Sommario/riassunto

This volume contains the proceedings of Formal Methods 2005, the 13th International Symposium on Formal Methods held in Newcastle upon Tyne, UK, during July 18–22, 2005. Formal Methods Europe (FME, www.fmeurope.org) is an independent association which aims to stimulate the use of, and research on, formal methods for system development. FME conferences began with a VDM Europe symposium in 1987. Since then, the meetings have grown and have been held about once every 18 months. Throughout the years the symposia have been notably successful in bringing together researchers, tool developers, vendors, and users, both from academia and from industry. Formal Methods 2005 confirms this success. We received 130 submissions to the main conference, from all over the world. Each submission was carefully refereed by at least three reviewers. Then, after an intensive, in-depth discussion, the Program Committee selected 31 papers for presentation at the conference. They form the bulk of this volume. We would like to thank all the Program Committee members and the referees for their excellent and efficient work. Apart from the selected contributions, the Committee invited three keynote lectures from Mathai Joseph, Marie-Claude Gaudel and Chris Johnson. You will find the abstracts/papers for their keynote lectures in this volume as well. An innovation for the FM2005 program was a panel discussion on the history of formal methods, with Jean-Raymond Abrial, Dines Bjørner, Jim

Horning and Cli? Jones as panelists. Unfortunately, it was not possible to re?ect this event in the current volume, but you will ?nd the material documenting it elsewhere (see the conference Web page).
