

1. Record Nr.	UNISA996466092003316
Titolo	Formal Approaches to Software Testing and Runtime Verification [[electronic resource]] : First Combined International Workshops FATES 2006 and RV 2006, Seattle, WA, USA, August 15-16, 2006, Revised Selected Papers // edited by Klaus Havelund, Manuel Núñez, Grigore Rosu, Burkhart Wolff
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ISBN	3-540-49703-X
Edizione	[1st ed. 2006.]
Descrizione fisica	1 online resource (VIII, 255 p.)
Collana	Programming and Software Engineering ; ; 4262
Disciplina	005.131
Soggetti	Software engineering Programming languages (Electronic computers) Computer logic Management information systems Computer science Software Engineering/Programming and Operating Systems Software Engineering Programming Languages, Compilers, Interpreters Logics and Meanings of Programs Management of Computing and Information Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	International conference proceedings.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Talks -- Multi-paradigmatic Model-Based Testing -- Aspects for Trace Monitoring -- Regular Papers -- A Symbolic Framework for Model-Based Testing -- A Test Calculus Framework Applied to Network Security Policies -- Hybrid Input-Output Conformance and Test Generation -- Generating Tests from EFSM Models Using Guided Model Checking and Iterated Search Refinement -- Decompositional Algorithms for Safety Verification and Testing of Aspect-Oriented Systems -- Model-Based Testing of Thin-Client Web Applications -- Synthesis of Scenario Based Test Cases from B Models -- State- Identification Problems for Finite-State Transducers -- Deterministic

Dynamic Monitors for Linear-Time Assertions -- Robustness of Temporal Logic Specifications -- Goldilocks: Efficiently Computing the Happens-Before Relation Using Locksets -- Dynamic Architecture Extraction -- Safety Property Driven Test Generation from JML Specifications -- Online Testing with Reinforcement Learning.

Sommario/riassunto

Software validation is one of the most cost-intensive tasks in modern software production processes. The objective of FATES/RV 2006 was to bring scientists from both academia and industry together to discuss formal approaches to test and analyze programs and monitor and guide their executions. Formal approaches to test may cover techniques from areas like theorem proving, model checking, constraint resolution, static program analysis, abstract interpretation, Markov chains, and various others. Formal approaches to runtime verification use formal techniques to improve traditional ad-hoc monitoring techniques used in testing, debugging, performance monitoring, fault protection, etc. The FATES/RV 2006 workshop selected 14 high-quality papers out of 31 submissions. Each paper underwent at least three anonymous reviews by either

PC members or external reviewers selected by them.

In addition to the 14 regular papers, the proceedings contain two papers corresponding to the invited talks by Wolfgang Grieskamp (Microsoft Research, USA) and Oege de Moor (Oxford University, UK). This was the first time that the two workshops, FATES and RV, were held together. The success of this joint edition shows that the integration of these two communities can be profitable for both of them. Previous editions of these two events were held in the following places: FATES 2001 was held in Aalborg (Denmark) and FATES 2002 in Brno (Czech Republic). In both cases, the workshop was affiliated with CONCUR. FATES 2003 and FATES 2004 were held in Montreal (Canada) and Vienna (Austria), respectively, in affiliation with ASE. FATES 2005 was co-located with CAV in Edinburgh (UK). Since 2003, the FATES workshop proceedings have been published by Springer (LNCS series).
