

1. Record Nr.	UNISA996466035803316
Titolo	Formal Aspects of Component Software [[electronic resource]] : 8th International Symposium, FACS 2011, Oslo, Norway, September 14-16, 2011, Revised Selected Papers // edited by Farhad Arbab, Peter Csaba Ölveczky
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2012
ISBN	3-642-35743-1
Edizione	[1st ed. 2012.]
Descrizione fisica	1 online resource (X, 369 p. 131 illus.)
Collana	Programming and Software Engineering ; ; 7253
Disciplina	004.01/51
Soggetti	Software engineering Mathematical logic Computer logic Programming languages (Electronic computers) Computer programming Management information systems Computer science Software Engineering Mathematical Logic and Formal Languages Logics and Meanings of Programs Programming Languages, Compilers, Interpreters Programming Techniques Management of Computing and Information Systems Conference proceedings.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Taming Distributed System Complexity through Formal Patterns -- Composing Safe Systems -- A Denotational Model for Component-Based Risk Analysis -- Synthesis of Hierarchical Systems -- A Modal Specification Theory for Components with Data -- Evaluating the Performance of Model Transformation Styles in Maude -- Interactive Transformations from Object-Oriented Models to Component-Based

Models -- Runtime Verification of Temporal Patterns for Dynamic Reconfigurations of Components -- Timed Conformance Testing for Orchestrated Service Discovery -- Realizability of Choreographies for Services Interacting Asynchronously -- Networks of Real-Time Actors: Schedulability Analysis and Coordination -- A Formal Model of Object Mobility in Resource-Restricted Deployment Scenarios -- The Logic of XACML -- A Proof Assistant Based Formalization of MDE Components -- Controlling an Iteration-Wise Coherence in Dataflow -- Learning from Failures: A Lightweight Approach to Run-Time Behavioural Adaptation -- Verifying Safety of Fault-Tolerant Distributed Components -- Reducing the Model Checking Cost of Product Lines Using Static Analysis Techniques -- Biographical Modelling of Architectural Patterns -- Coordinated Execution of Heterogeneous Service-Oriented Components by Abstract State Machines -- Verifying Temporal Properties of Use-Cases in Natural Language.

Sommario/riassunto

This book constitutes revised selected papers of the 8th International Workshop on Formal Aspects of Component Software, FACS 2011, held in Oslo, Norway in September 2011. The 18 full papers presented together with 3 invited talks were carefully reviewed and selected from 46 submissions. They cover the topics of formal models for software components and their interaction, design and verification methods for software components and services, formal methods and modeling languages for components and services, industrial or experience reports, and case studies, autonomic components and self-managed applications, models for QoS and other extra-functional properties (e. g., trust, compliance, security) of components and services, formal and rigorous approaches to software adaptation and self-adaptive systems, and components for real-time, safety-critical, secure, and/or embedded systems.
