1. Record Nr. UNISA996465547803316 Formal Aspects of Component Software [[electronic resource]]: 14th **Titolo** International Conference, FACS 2017, Braga, Portugal, October 10-13, 2017, Proceedings / / edited by José Proença, Markus Lumpe Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2017 **ISBN** 3-319-68034-X Edizione [1st ed. 2017.] 1 online resource (X, 251 p. 58 illus.) Descrizione fisica Programming and Software Engineering;; 10487 Collana 004.0151 Disciplina Soggetti Software engineering Programming languages (Electronic computers) Mathematical logic Computer logic Algorithms Computers Software Engineering Programming Languages, Compilers, Interpreters Mathematical Logic and Formal Languages Logics and Meanings of Programs Algorithm Analysis and Problem Complexity The Computing Profession Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Component-Based Modeling in Mediator -- A Component-oriented Framework for Autonomous Agents -- Coordination of Dynamic Software Components with JavaBIP -- A Formal Model of Parallel Execution on Multicore Architectures with Multilevel Cache -- Guarded Terms for Rewriting Modulo SMT -- On Weighted Configuration Logics -- Compositional Model Checking is Lively -- Safety Analysis of Software Components of a Dialysis Machine Using Model Checking --

TOM: a Model-Based GUI Testing Framework -- Correctness-by-

learning of Infinite-state Component-based Sytems -- The

Sommario/riassunto

Implementation of Object Propositions: the Oprop Verification Tool --Certification of Workflows in a Component-Based Cloud of High Performance Computing Services -- Fault Localization in Service Compositions -- Correct Composition of Dephased Behavioural Models.

This book constitutes the thoroughly revised selected papers from the 14th International Conference on Formal Aspects of Component Software, FACS 2017, held in Braga, Portugal, in October 2017. The 14 full papers presented were carefully reviewed and selected from 26 submissions. FACS 2016 is concerned with how formal methods can be used to make component-based and service-oriented software development succeed. Formal methods have provided a foundation for component-based software by successfully addressing challenging issues such as mathematical models for components, composition and adaptation, or rigorous approaches to verification, deployment, testing, and certification.