Record Nr. UNISA996465308103316 Formal Verification of Object-Oriented Software [[electronic resource]]: **Titolo** International Conference, FoVeOO 2011, Turin, Italy, October 5-7, 2011, Revised Selected Papers / / edited by Bernhard Beckert, Ferruccio Damiani, Dilian Gurov Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2012 **ISBN** 3-642-31762-6 Edizione [1st ed. 2012.] Descrizione fisica 1 online resource (X, 251 p. 34 illus.) Programming and Software Engineering;; 7421 Collana Disciplina 005.1 Soggetti Software engineering Computer programming Programming languages (Electronic computers) Computer logic Management information systems Computer science Software Engineering Programming Techniques 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 Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Modular Verification of Object-Based Programs -- The COST IC0701 Verification Competition 2011 -- The Practical Application of Formal Methods: Where Is the Benefit for Industry? -- Isolation Types and Multi-core Architectures -- Modelling Adaptable Distributed Object Oriented Systems Using the HATS Approach: A Fredhopper Case Study. -Modeling and Analyzing the Interaction of C and C++ Strings --Integration of Bounded Model Checking and Deductive Verification -- A Probabilistic Framework for Object-Oriented Modeling and Analysis of Distributed Systems -- Automated Detection of Non-termination and

NullPointerExceptions for Java Bytecode -- An Abstract JVM -- A

Sommario/riassunto

Verified Implementation of Priority Monitors in Java -- Scheduler-Specific Confidentiality for Multi-threaded Programs and Its Logic-Based Verification -- A Formal Model of User-Defined Resources in Resource-Restricted Deployment Scenarios -- A K-Based Formal Framework for Domain-Specific Modelling Languages -- Verification of Information Flow Properties of Java Programs without Approximations.

This book presents the thoroughly refereed post-conference proceedings of the International Conference on Formal Verification of Object-Oriented Software, FoVeOOS 2011, held in Turin, Italy, in October 2011 – organised by COST Action IC0701. The 10 revised full papers presented together with 5 invited talks were carefully reviewed and selected from 19 submissions. Formal software verification has outgrown the area of academic case studies, and industry is showing serious interest. The logical next goal is the verification of industrial software products. Most programming languages used in industrial practice are object-oriented, e.g. Java, C++, or C#. FoVeOOS 2011 aimed to foster collaboration and interactions among researchers in this area.