Record Nr. UNINA9910484667803321 Verification, model checking, and abstract interpretation: 11th **Titolo** international conference, VMCAI 2010; Madrid, Spain, January 17-19, 2010; proceedings / / Gilles Barthe, Manuel Hermenegildo (eds.) Berlin, : Springer, c2010 Pubbl/distr/stampa **ISBN** 1-280-38541-3 9786613563330 3-642-11319-2 [1st ed. 2010.] Edizione Descrizione fisica 1 online resource (X, 397 p.) Collana Lecture notes in computer science, , 0302-9743; ; 5944 LNCS sublibrary. SL 1, Theoretical computer science and general issues Altri autori (Persone) BartheGilles <1967-> HermenegildoManuel 005.1 Disciplina Soggetti Computer programs - Verification Computer science Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Invited Talks -- Analysis of Systems with Stochastic Process Creation --Verifying Concurrent Programs with Chalice -- Static Timing Analysis for Hard Real-Time Systems -- Invited Tutorials -- Abstract Interpretation-Based Protection -- Advances in Probabilistic Model Checking -- Building a Calculus of Data Structures -- Regular Papers -- Temporal Reasoning for Procedural Programs -- Improved Model Checking of Hierarchical Systems -- Path-Oriented Reachability Verification of a Class of Nonlinear Hybrid Automata Using Convex Programming -- Complexity Bounds for the Verification of Real-Time Software -- An Abstract Domain to Discover Interval Linear Equalities

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## Sommario/riassunto

This book constitutes the refereed proceedings of the 11th International Conference on Verification, Model Checking, and Abstract Interpretation, VMCAI 2010, held in Madrid, Spain, in January 2010. The 21 papers included in this volume were carefully reviewed and selected from 57 submissions. In addition 3 invited talks and 3 invited tutorials are presented. Topics covered by VMCAI include program verification, program certification, model checking, debugging techniques, abstract interpretation, abstract domains, static analysis, type systems, deductive methods, and optimization.