Record Nr. UNINA9910484233003321 Multicore Software Engineering, Performance, and Tools: International **Titolo** Conference, MUSEPAT 2013, Saint Petersburg, Russia, August 19-20, 2013, Proceedings / / edited by João M. Lourenço, Eitan Farchi Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa . 2013 **ISBN** 3-642-39955-X Edizione [1st ed. 2013.] 1 online resource (X, 111 p. 37 illus.) Descrizione fisica Programming and Software Engineering;; 8063 Collana 005.1 Disciplina Soggetti Special purpose computers Computer system failures Software engineering Programming languages (Electronic computers) Operating systems (Computers) Computer programming Special Purpose and Application-Based Systems System Performance and Evaluation Software Engineering Programming Languages, Compilers, Interpreters **Operating Systems Programming Techniques** 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 Performance Analysis and Algorithms -- Self-timed Scheduling and Execution of Nonlinear Pipelines with Parallel Stages -- MVA-based Probabilistic Model of Shared Memory with Round Robin Arbiter for Predicting Performance With Heterogeneous -- Workload -- MHS2: A Map-Reduce heuristic-driven minimal hitting set search algorithm --Programming Models and Optimization -- Handling Parallelism in a Concurrency Model -- On the Relevance of Total-Order Broadcast Implementations in Replicated Software Transactional Memories --How to Cancel a Task -- Testing and Debugging -- Automatically

Repairing Concurrency Bugs with ARC -- A Modular Approach to Model-Based Testing of Concurrent Programs -- A Dynamic Approach to Isolating Erroneous Event Patterns in Concurrent Program Executions.

Sommario/riassunto

This book constitutes the refereed proceedings of the International Conference on Multiscore Software Engineering, Performance, and Tools, MUSEPAT 2013, held in Saint Petersburg, Russia, in August 2013. The 9 revised papers were carefully reviewed and selected from 25 submissions. The accepted papers are organized into three main sessions and cover topics such as software engineering for multicore systems; specification, modeling and design; programing models, languages, compiler techniques and development tools; verification, testing, analysis, debugging and performance tuning, security testing; software maintenance and evolution; multicore software issues in scientific computing, embedded and mobile systems; energy-efficient computing as well as experience reports.