1. Record Nr. UNINA9910483502503321 Network and Parallel Computing: 10th IFIP International Conference, **Titolo** NPC 2013, Guiyang, China, September 19-21, 2013, Proceedings // edited by Ching-Hsien Hsu, Xiaoming Li, Xuanhua Shi, Ran Zheng Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-642-40820-6 Edizione [1st ed. 2013.] 1 online resource (XIV, 418 p. 176 illus.) Descrizione fisica Theoretical Computer Science and General Issues, , 2512-2029;; 8147 Collana 004.35 Disciplina Soggetti Computer engineering Computer networks Operating systems (Computers) Algorithms Computer Engineering and Networks Operating Systems Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Parallel Programming and Algorithms -- A Virtual Network Embedding Algorithm Based on Graph Theory -- Access Annotation for Safe Program Parallelization -- Extracting Threaded Traces in Simulation Environments -- A Fine-Grained Pipelined Implementation of LU Decomposition on SIMD Processors -- FRESA: A Frequency-Sensitive Sampling-Based Approach for Data Race Detection -- One-to-One Disjoint Path Covers in DCell -- Cloud Resource Management -- A Network-Aware Virtual Machine Allocation in Cloud Datacenter --Research on the RRB+ Tree for Resource Reservation -- Totoro: A Scalable and Fault-Tolerant Data Center Network by Using Backup Port -- A Cloud Resource Allocation Mechanism Based on Mean-Variance Optimization and Double Multi-Attribution Auction -- ITC-LM: A Smart Iteration-Termination Criterion Based Live Virtual Machine Migration --A Scheduling Method for Multiple Virtual Machines Migration in Cloud -- Parallel Architectures -- Speeding Up Galois Field Arithmetic on Intel

MIC Architecture -- Analyzing the Characteristics of Memory

Subsystem on Two Different 8-Way NUMA Architectures --Software/Hardware Hybrid Network-on-Chip Simulation on FPGA --Total Exchange Routing on Hierarchical Dual-Nets -- Efficiency of Flexible Rerouting Scheme for Maximizing Logical Arrays -- An Efficient Crosstalk-Free Routing Algorithm Based on Permutation Decomposition for Optical Multi-log2N Switching Networks -- Conditional Diagnosability of Complete Josephus Cubes -- Circular Dimensional-Permutations and Reliable Broadcasting for Hypercubes and Möbius Cubes -- Multi-core Computing and GPU -- Accelerating Parallel Frequent Itemset Mining on Graphics Processors with Sorting --Asymmetry-Aware Scheduling in Heterogeneous Multi-core Architectures -- Scalable-Grain Pipeline Parallelization Method for Multi-core Systems -- An Effective Approach for Vocal Melody Extraction from Polyphonic Music on GPU -- Modified Incomplete Cholesky Preconditioned Conjugate Gradient Algorithm on GPU for the 3D Parabolic Equation -- Partition-Based Hardware Transactional Memory for Many-Core Processors -- Miscellaneous -- Roadside Infrastructure Placement for Information Dissemination in Urban ITS Based on a Probabilistic Model -- Relay Hop Constrained Rendezvous Algorithm for Mobile Data Gathering in Wireless Sensor Networks --Energy Efficient Task Scheduling in Mobile Cloud Computing -- Bot Infer: A Bot Inference Approach by Correlating Host and Network Information -- On-demand Proactive Defense against Memory Vulnerabilities -- Mahasen: Distributed Storage Resource Broker --Probabilistic QoS Analysis of Web Services -- A Novel Search Engine to Uncover Potential Victims for APT Investigations.

## Sommario/riassunto

This book constitutes the proceedings of the 10th IFIP International Conference on Network and Parallel Computing, NPC 2013, held in Guiyang, China, in September 2013. The 34 papers presented in this volume were carefully reviewed and selected from 109 submissions. They are organized in topical sections named: parallel programming and algorithms; cloud resource management; parallel architectures; multi-core computing and GPU; and miscellaneous.