1. Record Nr. UNINA9910483724503321

Titolo	High Performance Computing - HiPC 2006 : 13th International Conference Bangalore, India, December 18-21, 2006, Proceedings / / edited by Yves L. Robert, Manish Parashar, Ramamurthy Badrinath, Viktor K. Prasanna
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2006
ISBN	3-540-68040-3
Edizione	[1st ed. 2006.]
Descrizione fisica	1 online resource (XXIV, 642 p.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 4297
Altri autori (Persone)	RobertYves <1938->
Disciplina	004/.35
Soggetti	Microprocessors Computer architecture Software engineering Computer engineering Computer networks Algorithms Computer science Computer science - Mathematics Processor Architectures Software Engineering Computer Engineering and Networks Theory of Computation Mathematics of Computing
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	Keynote Addresses -- Navigability of Small World Networks -- Opportunities and Challenges for Future Generation Grid Research -- Software Challenges for Multicore Computing -- Imaging-Based Systems Biology -- Advanced Scientific Computing: An Extraordinary Tool for Extraordinary Science -- High-Performance Computing for the Masses -- Banquet Speech -- Conquering Complexity in Information Systems -- Plenary Session – Best Papers -- Algorithmic Ramifications

of Prefetching in Memory Hierarchy -- A Cache-Partitioning Aware Replacement Policy for Chip Multiprocessors -- Session I – Scheduling and Load Balancing -- A Security-Oriented Task Scheduler for Heterogeneous Distributed Systems -- Minimizing Average Response Time for Scheduling Stochastic Workload in Heterogeneous Computational Grids -- Advanced Reservation-Based Scheduling of Task Graphs on Clusters -- Estimation Based Load Balancing Algorithm for Data-Intensive Heterogeneous Grid Environments -- Improving the Flexibility of the Deficit Table Scheduler -- Session II – Architectures -- A Cache-Pinning Strategy for Improving Generational Garbage Collection -- A Realizable Distributed Ion-Trap Quantum Computer -- Segmented Bitline Cache: Exploiting Non-uniform Memory Access Patterns -- Trade-Offs in Transient Fault Recovery Schemes for Redundant Multithreaded Processors -- Supporting Speculative Multithreading on Simultaneous Multithreaded Processors -- Session III – Network and Distributed Algorithms -- Dynamic Internet Congestion with Bursts -- A Repair Mechanism for Fault-Tolerance for Tree-Structured Peer-to-Peer Systems -- Utility-Based Adaptation of RED Parameters -- Capturing an Intruder in Product Networks -- Efficient In-Network Evaluation of Multiple Queries -- Session IV – Application Software -- Island Model Parallel GeneticAlgorithm for Optimization of Symmetric FRP Laminated Composites -- Experiments with Wide Area Data Coupling Using the Seine Coupling Framework -- HeteroMPI+ScaLAPACK: Towards a ScaLAPACK (Dense Linear Solvers) on Heterogeneous Networks of Computers -- Parallel Implementation of a Spline Based Computational Approach for Singular Perturbation Problems -- Collaborative Grid Process Creation Support in an Engineering Domain -- Session V – Network Services -- A Multi-attribute Data Structure with Parallel Bloom Filters for Network Services -- Receive Side Coalescing for Accelerating TCP/IP Processing -- Minimizing Metadata Access Latency in Wide Area Networked File Systems -- Connecting Pervasive Frameworks Through Mediation -- Error Resilient Video Streaming for Heterogeneous Networks -- Session VI – Applications -- Exploring Thread and Memory Placement on NUMA Architectures: Solaris and Linux, UltraSPARC/FirePlane and Opteron/HyperTransport -- Low Power Scheduling of DAGs to Minimize Finish Times -- GPU-ClustalW: Using Graphics Hardware to Accelerate Multiple Sequence Alignment -- Load Balanced Block Lanczos Algorithm over GF(2) for Factorization of Large Keys -- Parallel Support Graph Preconditioners -- Session VII – Ad-Hoc Networks -- Group Based Routing in Disconnected Ad Hoc Networks -- A Hybrid Routing Scheme for Mobile Ad Hoc Networks with Mobile Backbones -- K-Tree: A Multiple Tree Video Multicast Protocol for Ad Hoc Wireless Networks -- Towards Estimating Lifetime of Ad Hoc Wireless Networks -- A Proxy Based Efficient Checkpointing Scheme for Fault Recovery in Mobile Grid System -- Session VIII – Systems Software -- Impact of Noise on Scaling of Collectives: An Empirical Evaluation -- DDSS: A Low-Overhead Distributed Data Sharing Substrate for Cluster-Based Data-Centers overModern Interconnects -- Proactive Fault Tolerance in MPI Applications Via Task Migration -- Exploring Energy-Performance Trade-Offs for Heterogeneous Interconnect Clustered VLIW Processors -- Distributed Anemone: Transparent Low-Latency Access to Remote Memory -- Session IX – Sensor Networks and Performance Evaluation -- Scalable Localization in Wireless Sensor Networks -- A Novel Real-Time MAC Protocol Exploiting Spatial and Temporal Channel Diversity in Wireless Industrial Networks -- Collective Communication Costs Analysis over Gigabit Ethernet and InfiniBand -- An Efficient MAP Classifier for Sensornets -- Performance Evaluation of a Chip-

	MultiThreading Server for High Performance Computing Applications -- Session X – Routing and Data Management Algorithms -- A Study on the Locality Behavior of Minimum Spanning Tree Algorithms -- A Precomputation-Based Scheme for QoS Routing and Fair Bandwidth Allocation -- Heuristics for Flash-Dissemination in Heterogenous Networks -- B-PIC: A Novel Caching Scheme for Multimedia Streaming Servers -- Gvu: A View-Oriented Framework for Data Management in Grid Environments.
Sommario/riassunto	This book constitutes the refereed proceedings of the 13th International Conference on High-Performance Computing, HiPC 2006, held in Bangalore, India, December 2006. Coverage in this volume includes scheduling and load balancing, network and distributed algorithms, application software, network services, ad-hoc networks, systems software, sensor networks and performance evaluation, as well as routing and data management algorithms.