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Preface

Welcome to the proceedings of the 2007 International Conference on High Performance Computing and Communications (HPCC 2007), which was held in Houston, Texas, USA, September 26–28, 2007.

There have been many exciting developments in all aspects of HPC over the last decade and more exciting developments are on the horizon with, for example, the petaflops performance barrier being targeted in the near future. The rapid expansion in computing and communications technology has stimulated the growth of powerful parallel and distributed systems with an ever increasing demand for HPC in many disciplines. This, in turn, has increased the requirements for more reliable software, better algorithms, more comprehensive models and simulations and represents a challenge to the HPC community to produce better tools, research new areas, etc. Hence conferences, like HPCC 2007, play an important role in enabling engineers and scientists to come together in order to address all HPC-related challenges and to present and discuss their ideas, research results and applications experience.

This year there were 272 paper submissions from all across the world, not only from Europe, North America and South America but also from Asia and the Pacific. All the papers were reviewed by at least three referees from the conference's technical program committee or their colleagues. In order to allocate as many papers as possible and keep the high quality of the conference, we finally decided to accept 69 papers for the conference, which represented the acceptance rate of 25%. We believe that all of these papers and topics not only provide novel ideas, new results, work in progress and state-of-the-art techniques in this field, but will also stimulate future research activities in the area of high performance computing and communications.

This conference is a result of the hard work of very many people such as the program vice chairs, the external reviewers and the program and technical committee members. We would like to express our sincere thanks to everyone involved. Ultimately, however, the success of the conference will be judged by how well the delegates have participated, learnt, interacted and established contacts with other researchers. The committees have provided the venue and created the environment to allow these objectives to be achieved. It is now up to all of us to ensure that the conference is an outstanding success.

We wish you a successful, stimulating and rewarding conference and look forward to seeing you again at future HPCC conferences.

August 2007

Ronald Perrott
Barbara Chapman
Jaspal Subhlok
Rodrigo Fernandes de Mello
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Table of Contents

Keynote Speech

Programming Challenges for Petascale and Multicore Parallel Systems	1
<i>Vivek Sarkar</i>	
Towards Enhancing OpenMP Expressiveness and Performance	2
<i>Haoqiang Jin</i>	
Bandwidth-Aware Design of Large-Scale Clusters for Scientific Computations	3
<i>Mitsuhisa Sato</i>	
OpenMP 3.0 – A Preview of the Upcoming Standard	4
<i>Larry Meadows</i>	
Manycores in the Future	5
<i>Robert Schreiber</i>	
The Changing Impact of Semiconductor Technology on Processor Architecture	6
<i>Ray Simar</i>	

Cluster Computing

A Windows-Based Parallel File System	7
<i>Lungpin Yeh, Juei-Ting Sun, Sheng-Kai Hung, and Yarsun Hsu</i>	
PARMI: A Publish/Subscribe Based Asynchronous RMI Framework for Cluster Computing	19
<i>Heejin Son and Xiaolin Li</i>	
Coarse-Grain Time Slicing with Resource-Share Control in Parallel-Job Scheduling	30
<i>Bryan Esbaugh and Angela C. Sodan</i>	
Quality Assurance for Clusters: Acceptance-, Stress-, and Burn-In Tests for General Purpose Clusters	44
<i>Matthias S. Müller, Guido Juckeland, Matthias Jurenz, and Michael Kluge</i>	
Performance Evaluation of Distributed Computing over Heterogeneous Networks	53
<i>Ouissem Ben Fredj and Éric Renault</i>	

Data Mining, Management and Optimization

Hybrid Line Search for Multiobjective Optimization 62
Crina Grosan and Ajith Abraham

Continuous Adaptive Outlier Detection on Distributed Data Streams ... 74
Liang Su, Weihong Han, Shuqiang Yang, Peng Zou, and Yan Jia

A Data Imputation Model in Sensor Databases 86
Nan Jiang

An Adaptive Parallel Hierarchical Clustering Algorithm..... 97
Zhaopeng Li, Kenli Li, Degui Xiao, and Lei Yang

Distributed, Mobile and Pervasive Systems

Resource Aggregation and Workflow with Webcom 108
Oisín Curran, Paddy Downes, John Cunneiffe, Andy Shearer, and John P. Morrison

Performance Evaluation of View-Oriented Parallel Programming on Cluster of Computers 120
Haifeng Shang, Jiaqi Zhang, Wenguang Chen, Weimin Zheng, and Zhiyi Huang

Maximum-Objective-Trust Clustering Solution and Analysis in Mobile Ad Hoc Networks 132
Qiang Zhang, Guangming Hu, and Zhenghu Gong

A New Method for Multi-objective TDMA Scheduling in Wireless Sensor Networks Using Pareto-Based PSO and Fuzzy Comprehensive Judgement 144
Tao Wang, Zhiming Wu, and Jianlin Mao

Embedded Systems

Energy-Aware Online Algorithm to Satisfy Sampling Rates with Guaranteed Probability for Sensor Applications 156
Meikang Qiu and Edwin H.-M. Sha

A Low-Power Globally Synchronous Locally Asynchronous FFT Processor 168
Yong Li, Zhiying Wang, Jian Ruan, and Kui Dai

Parallel Genetic Algorithms for DVS Scheduling of Distributed Embedded Systems..... 180
Man Lin and Chen Ding

Journal Remap-Based FTL for Journaling File System with Flash Memory 192
Seung-Ho Lim, Hyun Jin Choi, and Kyu Ho Park

Grid Computing

A Complex Network-Based Approach for Job Scheduling in Grid Environments	204
<i>Renato P. Ishii, Rodrigo F. de Mello, and Laurence T. Yang</i>	
Parallel Database Sort and Join Operations Revisited on Grids	216
<i>Werner Mach and Erich Schikuta</i>	
Performance Prediction Based Resource Selection in Grid Environments	228
<i>Peggy Lindner, Edgar Gabriel, and Michael M. Resch</i>	
Online Algorithms for Single Machine Schedulers to Support Advance Reservations from Grid Jobs	239
<i>Bo Li and Dongfeng Zhao</i>	
CROWN FlowEngine: A GPEL-Based Grid Workflow Engine.....	249
<i>Jin Zeng, Zongxia Du, Chunming Hu, and Jinpeng Huai</i>	
Dynamic System-Wide Reconfiguration of Grid Deployments in Response to Intrusion Detections.....	260
<i>Jonathan Rowanhill, Glenn Wasson, Zach Hill, Jim Basney, Yuliyani Kiryakov, John Knight, Anh Nguyen-Tuong, Andrew Grimshaw, and Marty Humphrey</i>	
File and Memory Security Analysis for Grid Systems	273
<i>Unnati Thakore and Lorie M. Liebrock</i>	
Business Model and the Policy of Mapping Light Communication Grid-Based Workflow Within the SLA Context	285
<i>Dang Minh Quan and Jörn Altmann</i>	
The One-Click Grid-Resource Model	296
<i>Martin Rehr and Brian Vinter</i>	
Optimizing Performance of Automatic Training Phase for Application Performance Prediction in the Grid	309
<i>Farrukh Nadeem, Radu Prodan, and Thomas Fahringer</i>	
Multiobjective Differential Evolution for Mapping in a Grid Environment	322
<i>Ivanoe De Falco, Antonio Della Cioppa, Umberto Scafuri, and Ernesto Tarantino</i>	
Latency in Grid over Optical Burst Switching with Heterogeneous Traffic	334
<i>Yuhua Chen, Wenjing Tang, and Pramode K. Verma</i>	

High-Performance Scientific and Engineering Computing

A Block JRS Algorithm for Highly Parallel Computation of SVDs 346
Mostafa I. Soliman, Sanguthevar Rajasekaran, and Reda Ammar

Concurrent Number Cruncher: An Efficient Sparse Linear Solver on the GPU 358
Luc Buatois, Guillaume Caumon, and Bruno Lévy

Adaptive Computation of Self Sorting In-Place FFTs on Hierarchical Memory Architectures 372
Ayaz Ali, Lennart Johnsson, and Jaspal Subhlok

Parallel Multistage Preconditioners Based on a Hierarchical Graph Decomposition for SMP Cluster Architectures with a Hybrid Parallel Programming Model 384
Kengo Nakajima

High Performance FFT on SGI Altix 3700 396
Akira Nukada, Daisuke Takahashi, Reiji Suda, and Akira Nishida

Security Enhancement and Performance Evaluation of an Object-Based Storage System 408
Po-Chun Liu, Sheng-Kai Hong, and Yarsun Hsu

Languages and Compilers for HPC

Strategies and Implementation for Translating OpenMP Code for Clusters 420
Deepak Eachempati, Lei Huang, and Barbara Chapman

Optimizing Array Accesses in High Productivity Languages 432
Mackale Joyner, Zoran Budimlić, and Vivek Sarkar

Software Pipelining for Packet Filters 446
Yoshiyuki Yamashita and Masato Tsuru

Speculative Parallelization – Eliminating the Overhead of Failure 460
Mikel Luján, Phyllis Gustafson, Michael Paleczny, and Christopher A. Vick

Networking: Protocols, Routing, Algorithms

Power-Aware Fat-Tree Networks Using On/Off Links 472
Marina Alonso, Salvador Coll, Vicente Santonja, Juan-Miguel Martínez, Pedro López, and José Duato