Program Chair’s Message

Program and Organizing Committees

Reviewers

High-Performance Mixed-Machine Heterogeneous Computing p. 3
Exploiting the Parallel Divide-and-Conquer Method to Solve the Symmetric Tridiagonal Eigenproblem p. 13
Biological Sequence Analysis on Distributed-Shared Memory Multiprocessors p. 20
Scheduling Tasks in DAG to Heterogeneous Processor System p. 27
Effective Scheduling in a Mixed Parallel and Sequential Computing Environment p. 32
Distributed Computation in a Three-Dimensional Mesh with Communication Delays p. 38
Automatic Performance Evaluation of Parallel Programs p. 43
Low-Level Benchmarking: Performance Profiles p. 50
Prediction of Parallel Algorithms Performance on Bus-Based Networks Using PVM p. 57
Experiences on Implementing PARMACS Macros to Run the SPLASH-2 Suite on Multiprocessors p. 64
Architecture-Dependent Partitioning of Dependence Graphs p. 70
The Performance of the Consensus Algorithm Running on FDDI p. 77
Rolt[superscript MP] - Replay of Lamport Timestamps for Message Passing Systems p. 87
Multiattribute Indexing with m-Q-trees p. 94
Modeling and Simulation of Integrated Modular Avionics p. 102
Improving Parallel Computer Communication: Dynamic Routing Balancing p. 111
Using Channel Pipelining in Reconfigurable Interconnection Networks p. 120
Virtual Networks and QoS for Cluster Computing p. 127
Ghost Packets: A Deadlock-Free Solution for k-ary n-Cube Networks p. 133
Casual Broadcasting Based on Sliding Windows p. 143
A Safe Distributed Deadlock Resolution Algorithm for the OR Request Model p. 150
Exploiting Write Semantics in Implementing Partially Replicated Casual Objects p. 157
PRAM Programming: Theory vs. Practice p. 164
Theory and Tool for Estimating Global Time in Parallel and Distributed Systems p. 173
Tool to Evaluate Performance in Distributed Heterogeneous Processing p. 180
A Toolset for Visualization and Analysis of Parallel Real-Time Embedded Systems Based on Fast Prototyping Techniques p. 186
Parallel Simulation in Rewriting Logic: Some Observations p. 197
A New Distribution Format for Reshaped Arrays in High Performance Fortran p. 204
High-Level CHILL Debugging System in Cross-Development Environments p. 211
A Case for Merging the ILP and DLP Paradigms p. 217
Teleseminars via ISDN - Technical Set-Up and User Reactions p. 225
The Contractors - An Alternative Paradigm for Worldwide Virtual Computing p. 230
An Efficient, Portable Software Platform for Parallel Image Processing p. 237
Method Execution on a Distributed Image Processing Back-End p. 243
Developing Non-Local Iterative Parallel Algorithms for GIS on a Workstation Network p. 250
Implementation of Parallel Thinning Algorithms on Multicomputers: Analysis of the Work Load Balance

Parallel Test Generation Using Circuit Partitioning and Spectral Techniques

Proposals Toward an Integrated Design Environment for Complex Embedded Systems

PARASOL Interface to New Parallel Solvers: A Case Study

Portable and Architecture Independent Parallel Performance Tuning Using a Call-Graph Profiling Tool

Taking the Distributed Nature of Cooperative Work Seriously

Tailorable Component Architectures for CSCW-Systems

Work Platforms: Basic Infrastructure for Groupware - A Conceptual Framework

Redesigning CSCW-Systems for Network Computing: Experience from the HotCon Project

Process Support for Cooperative Work on the World Wide Web

A Flexible State-Saving Library for Message-Passing Systems

An Algorithm for Optimization of Reconfiguration of Fault-Tolerant Multiprocessor Systems

A Hypermedia Distributed Application for Monitoring and Fault-Injection in Embedded Fault-Tolerant Parallel Programs

Deadlock Avoidance and Adaptive Routing in Interconnection Networks

Scalable Matrix Multiplication Algorithm for IRAM Architecture Machine

Preserving Message Integrity in Dynamic Process Migration

Dataflow Parallel Database Systems and LOGFLOW

Open and Reliable Group Communication Processing: The FITOS-RPC Approach

Providing Nested Parallelism and Load Balancing on Message Passing Libraries

Porting Applications Between PVM and Parix Under Ensemble

Virtual Cut-Through Implementation of the HB Packet Switching Routing Algorithm

Performance Issues of Message Transmission on a Cluster-Based Multicomputer

Multi-Lingual Threading

Practical Barrier Synchronisation

Loop Bounds Computation for Multilevel Tiling

ParC++: A Simple Extension of C++ to Parallel Systems

A Jacobi-Based Algorithm for Computing Symmetric Eigenvalues and Eigenvectors in a Two-Dimensional Mesh

Solving Sparse Triangular Systems on Distributed Memory Multicomputers

An Experimental Study of BSP Sorting Algorithms

Performance of the Pipelined Hash-Join Algorithm in a Heterogeneous Distributed Environment

Effective Usage of Vector Registers in Decoupled Vector Architectures

COMA-BC: A Cache Only Memory Architecture Multicomputer for Non-Hierarchical Common Bus Networks

A Special-Purpose Parallel Computer for Solving Partial Differential Equations

Author Index