Preface

These proceedings contain the papers presented at PARA 2002, the Sixth International Conference on Applied Parallel Computing. PARA 2002 was held in Espoo, Finland, June 15–18, 2002, and hosted by CSC, the Finnish information technology center for science. The general theme of the conference was advanced scientific computing.

The conference demonstrated the ability of advanced scientific computing to solve real-world problems, and highlighted methods, instruments, and trends in future scientific computing. The conference began with a one-day tutorial session on Grid programming.

The conference focused on an application-oriented, multi-disciplinary, and multi-scale approach. A wide variety of scientific computing applications were introduced, from semiconductor processing and behavior of the human body to oceanic and atmospheric phenomena.

Scientific computing coupled with multi-disciplinary and multi-scale expertise will play a significant role in solving challenging problems in science. The conference aims to demonstrate how difficult problems can be solved using mathematical modeling, efficient numerical methods, advanced program development, and tools in parallel computing.

The conference also focused on data analysis. The amount of information available is rapidly increasing. Data mining can be used to search for regularities in huge data sets, and new techniques in visualization, e.g., virtual environments, can be used in the interpretation of numerical information.

To the audience, the conference also reported on recent and future trends in generic technologies in scientific computing. These covered various environments, e.g., clusters, supercomputers, and Grid technologies.

April 2002   Juha Fagerholm, Juha Haataja, Jari Järvinen,
                              Mikko Lyly, Peter Råback, and Ville Savolainen

Organization

PARA 2002 was organized by CSC, the Finnish IT center for science. CSC is a center for high-performance computing and networking, owned by the Finnish Ministry of Education. CSC provides modeling, computing, and information services for universities, research institutions, and industrial companies.

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