

MESSAGE FROM THE PROGRAM CHAIR

Welcome to the 9th International Conference on High Performance Computing. The conference features 10 contributed paper sessions with 57 papers, 2 invited sessions with 9 papers, an industrial track session, a poster session, 5 keynote addresses, 10 tutorials, and 5 workshops. The 57 contributed papers are from 12 countries.

The 10 contributed paper sessions were put together by a distinguished and international program committee that comprised 56 committee members and 5 program vice-chairs: Oscar Ibarra (Algorithms), Vipin Kumar (Applications), Michel Cosnard (Architecture), Mani Srivastava (Communication Networks), and Francis Lau (Systems Software). Following a rigorous review process, the program committee selected 57 of the 145 papers that were submitted in response to the call for papers for presentation at the conference and inclusion in the conference proceedings. The 2 invited sessions were organized by Vijay Kumar (Biocomputation) and Viktor Prasanna (Embedded Systems), the industrial track by Sudheendra Hangal, the poster session by Paul Roe and Rajkumar Buyya, the keynote addresses by Cauligi Raghavendra, the tutorials by Srinivas Aluru, and the workshops by C.P. Ravikumar.

I wish to thank the entire program committee and especially the program vice-chairs for the excellent job they did in the review of the 145 submitted papers and subsequent selection of papers. Thanks also go to those who organized the remaining sessions, mentioned above, that make up the conference as well as to those who performed the administrative functions that are essential to the success of this conference. Finally, I thank Viktor Prasanna for giving me the opportunity to serve as program chair of this conference.

December 2002

Sartaj Sahni

MESSAGE FROM THE GENERAL CO-CHAIRS

It is our pleasure to welcome you to the 9th International Conference on High Performance Computing and to Bangalore, the IT capital of India. This message pays tribute to many volunteers who made this meeting possible.

We are indebted to Prof. Sartaj Sahni for his superb efforts as program chair in organizing an excellent technical program. We would like to thank the vice-chairs, Michel Cosnard, Oscar Ibarra, Vipin Kumar, Francis Lau, and Mani Srivastava for their efforts in putting together a strong program committee, which in turn reviewed the submissions and composed an excellent technical program. We would like to thank Vijay Kumar for his efforts in organizing the invited session on Biocomputation. Cauligi S. Raghavendra assisted us in inviting the keynote speakers.

Many volunteers contributed their efforts in organizing the meeting: Manish Parashar handled publicity, José Nelson Amaral interfaced with the authors and Springer-Verlag, with assistance from Angela French, to bring out these proceedings. David Bader acted as vice general chair, Paul Roe and Raj Buyya handled the poster/presentation session, Srinivas Aluru put together the tutorials, S.V. Sankaran assisted us with accommodation for student scholars, Ajay Gupta did a fine job in handling international financial matters, Dheeraj Sanghi administered scholarships for students from Indian academia, Sudheendra Hangal acted as industry liaison, Vinod Sanjay, though not listed in the announcements, assisted with publicity within India.

Continuing the tradition set at last year's meeting, several workshops were organized by volunteers. We would like to thank Srinivas Aluru, Rajendra Bera, Suthikshan Kumar, G. Manimaran, C.P. Ravikumar, C. Siva Ram Murthy, V. Sridhar, S.H. Srinivasan, and M. Vidyasagar for their efforts in putting together the workshop programs. These workshops were coordinated by C.P. Ravikumar.

We would like to thank all of them for their time and efforts.

Our special thanks go to A.K.P. Nambiar for his continued efforts in handling financial matters as well as coordinating the activities within India.

Major financial support for the meeting was provided by several leading IT companies. We would like to thank the following individuals for their support:

N.R. Narayana Murthy, Infosys,
Karthik Ramarao, Hewlett-Packard,
Kalyan Rao, Satyam,
Shubhra Roy, Intel India, and
M. Vidyasagar, TCS.

We would like to thank Kemal Ebcioglu for his efforts in obtaining sponsorship from the IFIP Working Group on Concurrent Systems.

Continued sponsorship of the meeting by the IEEE Computer Society, ACM, and the European Association for Theoretical Computer Science are much appreciated. Finally, we would like to thank Henryk Chrostek and Sumit Mohanty of USC and the Banquet staff at the Taj Residency, Bangalore for their assistance over the past year and Albee Jhoney, Nirmala Patel, and O. Pramod for their assistance with local arrangements.

December 2002

Viktor K. Prasanna
Uday Shukla

MESSAGE FROM THE VICE GENERAL CHAIR

It was a pleasure to welcome attendees to Bangalore and the 9th International Conference on High Performance Computing. It was an honor and a pleasure to be able to serve the international community by bringing together researchers, scientists, and students, from academia and industry, to this meeting in the technology capital of India.

First let me recognize **Manish Parashar** for his help publicizing this conference, and **José Nelson Amaral** for serving as the proceedings chair. **Srinivas Aluru** did an excellent job organizing tutorials presented by leading experts. HiPC 2002 includes 10 tutorials in areas likely to be at the forefront of high-performance computing in the next decade, such as computational biology, wireless networking, quantum computing, and pervasive computing.

I wish to thank all of the conference organizers and volunteers for their contributions to making HiPC 2002 a great success. I would especially like to thank the general co-chairs, **Viktor K. Prasanna** and **Uday Shukla**, for their enormous contributions steering and organizing this meeting. Their leadership and dedication is remarkable. It is to their credit that this meeting has become the premier international conference for high-performance computing. Special thanks are also due to the program chair, **Sartaj Sahni**, for his hard work assembling a high-quality technical program that includes contributed and invited papers, an industrial track, keynote addresses, tutorials, and several workshops.

December 2002

David A. Bader

CONFERENCE ORGANIZATION

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Viktor K. Prasanna, University of Southern California
Uday Shukla, IBM Global Services India Pvt. Limited

Vice General Chair

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Program Chair

Sartaj Sahni, University of Florida

Program Vice-chairs

Algorithms

Oscar Ibarra, University of California, Santa Barbara

Applications

Vipin Kumar, AHPCRC-University of Minnesota

Architecture

Michel Cosnard, INRIA, France

Communication Networks

Mani Srivastava, University of California, Los Angeles

Systems Software

Francis Lau, Hong Kong University

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Rajkumar Buyya, University of Melbourne

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Workshops Chair

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Scholarships Chair

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Srinivas Aluru, Iowa State University

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Chair

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Co-chairs

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C.P. Ravikumar, Texas Instruments India

S.H. Srinivasan, Satyam Computer Services Limited