

# 13<sup>th</sup> IEEE International Conference on High Performance Computing



**Bangalore, India**  
**December 18-21, 2006**  
**<http://www.hipc.org>**

## IMPORTANT DATES

April 5, 2006	Paper Submission Begins
May 5, 2006	Paper Submission Ends
May 12, 2006	Workshop Proposals Due
May 19, 2006	Tutorial Proposals Due
July 14, 2006	Accept/Reject Notification
August 18, 2006	Camera-Ready Submission
October 6, 2006	Poster/Presentation Summary
October 25, 2006	Poster Notification to Authors
November 7, 2006	Early Registration Deadline

## GENERAL CO-CHAIRS

Manish Parashar, Rutgers Univ., USA  
Ramamurthy Badrinath, HP, India

## VICE GENERAL CO-CHAIRS

Rajendra V. Boppana, Univ. of Texas, San Antonio, USA  
Rajeev Muralidhar, Intel, India

## STEERING COMMITTEE

David A. Bader, Georgia Inst. of Tech., USA  
Ramamurthy Badrinath, HP, India  
Frank Baetke, HP, USA  
R. Govindarajan, Indian Inst. of Science, India  
Harish Grama, IBM, India  
Vittal Kini, Intel, India  
N. S. Nagaraj, Infosys, India  
Viktor K. Prasanna, Univ. of Sth. California, USA (Chair)  
Venkat Ramana, Cray-Hinditron, India  
Sartaj Sahnii, Univ. of Florida, USA  
Dheeraj Sanghi, Indian Inst. of Tech., Kanpur, India  
V. Sridhar, Satyam Computer Services Ltd., India  
Harrick M. Vin, Tata Research, (TRDDC), Pune, India

## PROGRAM CHAIR

Yves Robert, ENS Lyon, France

## PROGRAM VICE CHAIRS

### Algorithms:

Srinivas Aluru, Iowa State Univ., USA

### Applications:

John Morrison, University College, Cork, Ireland

### Architecture:

Bradley Kuszmaul, Massachusetts Inst. of Tech., USA

### Communication Networks:

Yuanyuan Yang, SUNY, Stony Brook, USA

### Mobile and Sensor Computing:

Stéphane Ubéda, INSA Lyon, France

### Systems Software:

Sanjay Rajopadhye, Colorado State Univ., USA

## WORKSHOPS CHAIR

Manimaran Govindarasu, Iowa State Univ., USA

## POSTERS/PRESENTATIONS CHAIR

Rajeev Thakur, Argonne National Laboratory, USA

## TUTORIALS CHAIR

Rama K. Govindaraju, IBM, USA

## INDUSTRY LIAISON CO-CHAIRS

Vijay Mann, IBM, India  
Raghuram Tupuri, AMD, India

## REGISTRATION CHAIR

Susamma Barua, California State Univ., Fullerton, USA

## CALL FOR PAPERS

The 13th annual IEEE International Conference on High Performance Computing (HiPC 2006) will be held in Bangalore, India, during December 18-21, 2006. It will serve as a forum to present the current work by researchers from around the world, and act as a venue to provide stimulating discussions and highlight high performance computing (HPC) activities in Asia. The conference has a history of attracting participation from reputed researchers from all over the world. In addition to technical sessions consisting of contributed papers, the conference will include invited presentations, a poster session, tutorials, and vendor presentations. Further information about HiPC 2006 and the HiPC series of meetings is available on the conference website at <http://www.hipc.org>.

HiPC 2006 will focus on all aspects of high performance computing. Topics of interest include but are not limited to:

- Parallel and Distributed Algorithms
- Languages and Programming Environments
- Load Balancing, Scheduling and Resource Management
- Fault-Tolerant Algorithms and Systems
- Scientific/Engineering/Commercial Applications and Workloads
- Cluster and Grid Computing
- Peer-to-peer Algorithms and Networks
- Heterogeneous Computing
- Wireless and Mobile Computing
- Communication/Sensor Networks and Embedded Applications
- Emerging Computer Architectures
- Scalable Servers and Systems
- Power-Efficient and Reconfigurable Architectures
- Compiler Technologies for High-Performance Computing
- Operating Systems for Scalable High-Performance Computing
- Performance Evaluation and Analysis

Authors are invited to submit **original unpublished** manuscripts that demonstrate current research in all areas of high performance computing. The proceedings will be published by Springer-Verlag, Lecture Notes in Computer Science, and will be available at the conference.

Best paper awards, sponsored by Infosys, will be given for outstanding contributed papers in two areas: (a) Algorithms and Applications, and (b) Systems. Further details about the call for posters, workshops, tutorials, and exhibits as well as submission guidelines will be available at <http://www.hipc.org>.



Sponsored by: IEEE Computer Society Technical Committee on Parallel Processing (TCPP), ACM SIGARCH, European Association for Theoretical Computer Science, IFIP Working Group on Concurrent Systems, National Association of Software and Service Companies (NASSCOM), and Manufacturers' Association for Information Technology (MAIT).



# 13<sup>th</sup> IEEE International Conference on High Performance Computing

**Bangalore, India  
December 18-21, 2006**

**<http://www.hipc.org>**

## **HiPC 2006 ORGANIZATION**

### **PROGRAM CHAIR**

Yves Robert, ENS Lyon, France

### **PROGRAM VICE CHAIRS**

#### **Algorithms**

Srinivas Aluru,  
Iowa State  
Univ., USA

#### **Applications**

John Morrison,  
University College,  
Cork, Ireland

#### **Architecture**

Bradley Kuszmaul,  
Massachusetts Inst.  
of Tech., USA

#### **Communication Networks**

Yuanyuan Yang, SUNY,  
Stony Brook, USA

#### **Mobile and Sensor Computing**

Stéphane Ubéda,  
INSA Lyon, France

#### **Systems Software**

Sanjay Rajopadhye,  
Colorado State  
Univ., USA



### **PROGRAM COMMITTEE**

#### **Algorithms**

Mikhail Atallah, Purdue Univ., USA  
David A. Bader, Georgia Inst. of Tech., USA  
Robert Germain, IBM Watson Research Ctr., USA  
Ananth Grama, Purdue Univ., USA  
Phalguni Gupta, IIT, Kanpur, India  
Bruce Hendrickson, Sandia Nat. Labs., USA  
Alex Pothén, Old Dominion Univ., USA  
Sanguthevar Rajasekaran, Univ. of CT, USA  
Abhiram Ranade, IIT, Mumbai, India  
Andrew Rau-Chaplin, Univ. of Dalhousie, Canada  
Oliver Sinnen, Univ. of Auckland, New Zealand  
Pavlos Spirakis, Univ. of Patras, Greece  
Srikanta Tirthapura, Iowa State Univ., USA  
Denis Trystram, ID-IMAG, Grenoble, France

#### **Applications**

Brian Coghlan, Trinity College, Dublin, Ireland  
Simon Dobson, Univ. College, Dublin, Ireland  
James Doherty, Univ. College, Cork, Ireland  
Bernd Freisleben, Univ. of Marburg, Germany  
George Gravvanis, Democritus Univ. of Thrace,  
Greece  
Vipin Kumar, Univ. of Minnesota, USA  
Alexey Lastovetsky, Univ. College, Dublin, Ireland  
Hyunyoung Lee, Univ. of Denver, USA  
Ami Marowka, Shenkar College of Engineering  
and Design, Israel  
Esmond E. Ng, Lawrence Berkeley Nat. Lab., USA  
Marcin Paprzycki, Oklahoma State Univ., USA  
Adarsh Patil, Univ. College, Cork, Ireland  
Dana Petcu, Western Univ. of Timisoara, Romania  
Omer Rana, Cardiff Univ., UK  
Joel Saltz, Ohio State Univ., USA  
Matthew Smith, Univ. of Marburg, Germany  
Marek Tudruj, Polish-Japanese Inst. of IT, Poland

#### **Cyber Co-Chairs**

Sumir Chandra,  
Rutgers Univ., USA  
Viraj Bhat,  
Rutgers Univ., USA

#### **Finance Co-Chairs**

Ajay Gupta, Western  
Michigan Univ., USA  
B. V. Ramachandran,  
STP, Bangalore, India

#### **Local Arrangements Chair**

Ch. Kalyana Krishna,  
Dell Product Group,  
India

#### **Publications Chair**

Sushil K. Prasad,  
Georgia State  
Univ., USA

#### **Publicity Co-Chairs**

Rajeev R. Raje, Indiana Univ.  
Purdue Univ., USA  
Bo Hong, Drexel Univ., USA  
Manisha Dhanke, IBM, India

#### **Scholarships Co-Chairs**

Anu G. Bourgeois, Georgia  
State Univ., USA  
Madhusudhan Govindaraju,  
SUNY Binghamton, USA

#### **Architecture**

Srini Devadas, Massachusetts Inst. of Tech., USA  
Sandhya Dwarkadas, Univ. of Rochester, USA  
Kanad Ghose, SUNY, Binghamton, USA  
Andy Glew, Intel, USA  
Sebastien Hily, Intel, USA  
Mahmut Kandemir, Pennsylvania State Univ., USA  
Christos Kozyrakis, Stanford Univ., USA  
Sanjeev Kumar, Intel, USA  
Milo Martin, Univ. of Pennsylvania, USA  
Pierre Michaud, IRISA, Rennes, France  
Yanos Sazeides, Univ. of Cyprus, Cyprus  
Hans Vandierendonck, Univ. of Ghent, Belgium  
Craig Zilles, Univ. of Illinois, Urbana-Champaign,  
USA

#### **Communication Networks**

Jiannong Cao, Hong Kong Polytechnic Univ.,  
China  
Kartik Gopalan, Florida State Univ., USA  
Lisandro Granville, Federal Univ. of Rio Grande do  
Sul, Brazil  
Qianping Gu, Simon Fraser Univ., Canada  
Mathieu Latapy, LIAFA, Paris, France  
Xing Li, Tsinghua Univ., China  
Bin Liu, Tsinghua Univ., China  
Olav Lysne, Simula Research Lab. and Univ. of  
Oslo, Norway  
Yavuz Oruc, Univ. of Maryland, College Park, USA  
Mohamed Ould-Khaoua, Univ. of Glasgow, UK  
Andrzej Pelc, Univ. du Quebec en Outaouais,  
Canada  
Congduc Pham, Univ. de Pau, France  
Greg Plaxton, Univ. of Texas, Austin, USA  
Jang-Ping Sheu, National Central Univ., Taiwan  
Jingyuan Zhang, Univ. of Alabama, USA

#### **Mobile and Sensor Computing**

Demet Aksoy, Univ. of California, Davis, USA  
Sajal K. Das, Univ. of Texas, Arlington, USA  
Marcelo Dias de Amorim, LIP6, Paris, France  
Erol Gelenbe, Imperial College, London, UK  
Sandeep K. S. Gupta, Arizona State Univ., USA  
Fredrik Manne, Univ. of Bergen, Norway  
Rajeev Muralidhar, Intel, India  
Michael Neufeld, BBN Technologies, USA  
Sotiris Nikolettseas, Computer Tech. Inst., Patras,  
Greece  
Thomas Noel, Univ. de Strasbourg, France  
Stephan Olariu, Old Dominion Univ., USA  
Christian Prehofer, DoCoMo Euro-Labs, Munich,  
Germany  
Pedro Ruiz, Univ. of Murcia, Spain  
Stefan Weber, Trinity College, Dublin, Ireland  
Yang Yu, Motorola Research Lab., USA

#### **Systems Software**

Rumen Andonov, INRIA, Rennes, France  
Eduard Ayguade, UPC, Barcelona, Spain  
Scott Baden, Univ. of California, San Diego, USA  
Pedro Diniz, USC-ISI, Marina Del Rey, USA  
Ramaswamy Govindarajan, IISc, Bangalore, India  
Manish Gupta, IBM, Yorktown Heights, USA  
Ben Juurlink, Delft Univ. of Tech., Netherlands  
Uday Khedker, IIT, Mumbai, India  
Mitsuhisa Sato, Tsukuba Univ., Japan  
Siang Wun Song, Sao Paulo Univ., Brazil  
Michelle Strout, Colorado State Univ., USA  
Chau-Wen Tseng, Univ. of Maryland, College  
Park, USA  
Frédéric Vivien, INRIA and ENS Lyon, France  
Cho-Li Wang, Hong Kong Univ., China  
Jingling Xue, Univ. of New South Wales, Australia



Sponsored by: IEEE Computer Society Technical Committee on Parallel Processing (TCPP), ACM SIGARCH, European Association for Theoretical Computer Science, IFIP Working Group on Concurrent Systems, National Association of Software and Service Companies (NASSCOM), and Manufacturers' Association for Information Technology (MAIT).



[See overleaf for HiPC 2006 Call for Papers]