

Goa, popularly know as the "Rome of the East" and the "Pearl of the Orient" due to its exquisite beaches, magnificent scenic beauty, architectural splendor of its temples, churches and unique Indo-Portuguese culture, is among the foremost tourist destinations in India. A meeting point of races, religions and cultures of East and West over the centuries, the soul of Goa goes deep into its unique history, rich heritage and distinctive lifestyle, quite different from the rest of India.

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**G002 ,2 yeM Submission Dealine:** 



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HiPC

December 18 - 21, 2005

Goa, India

IFIP Working Group on Concurrent Systems

Manufacturers Association for Information

**HELD IN COOPERATION WITH** 

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ASU 2332-68006 AD (290 AS Angeles, CA 90089-2562 University of Southern California, EEB 200C High Performance Computing 2005



**High Performance** 12th IEEE International Conterence

December 18 - 21, 2005 • Goa, India

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The 12th Annual International Conference on High Performance Computing (HiPC 2005) will be held in Goa during December 18-21, 2005. It will serve as a forum to present the current work by researchers from around the world, act as a venue to provide stimulating discussions and highlight high performance computing activities in Asia. The conference has a history of attracting participation from reputed researchers from all over the world.

The eleventh meeting held in Bangalore, India, in 2004 had 48 contributed papers that were selected from over 250 submissions from 13 countries. The conference had tutorials on cutting edge topics in high performance computing and related areas by leading researchers from academia and industry. The 10th HiPC Conference (HiPC 2003) held in Hyderabad, India, in December 2003, had 48 contributed papers that were selected from 164 submissions from 11 countries and approximately 300 participants attended the meeting. Please refer to the website http://www.hipc.org for more information on previous meetings.

HiPC 2005 will emphasize the design and analysis of high performance computing and networking systems and their scientific, engineering, and commercial applications. In addition to technical sessions consisting of contributed papers, the conference will include invited presentations, a poster session, tutorials, and vendor presentations.

#### CALL FOR PAPERS

Authors are invited to submit original unpublished manuscripts that demonstrate current research in all areas of high performance computing including the design and analysis of parallel and distributed systems, embedded systems, and their applications in scientific, engineering, and commercial areas. Topics of interest include but are not limited to:

- Wireless and Mobile Computing
- Sensor Networks
- Communication Networks
- Web-based/Meta/Grid/P2P Computing
- Resource Management and Resource Area Networks
- Scalable Servers and System Areas Networks
- Scientific/Engineering Applications
- Commercial Applications and Workloads
- High-speed Networks and Interconnection Networks
- Power-Efficient and Reconfigurable Architectures
- Superscalar, Speculative, VLIW, and SMT Microarchitectures
- System Design for High Reliability
- Compiler Technology for Power-aware and High-performance Computing

- Parallel and Distributed Computing
- Parallel Algorithms
  - Heterogeneous Computing
  - Network- and Cluster-based Computing
- Context Aware Computing
- Embedded Applications and Systems
  Network Processor and Router Architectures
- Scalable and Latency-tolerant Algorithms
- Parallel Languages and Programming Environments
- EPIC Compilers and Software Support for ILP and TLP
- Operating Systems for Scalable and High-performance Computing
- Load Balancing and Scheduling
- High-performance Computing for Biology and Medicine

Submitted manuscripts should be structured as technical papers and may not exceed 15 double-spaced pages of text using 12 point size font on 8.5 x 11 inch pages with margins of at least 1 inch on each of the four sides. References, figures, tables, etc. may be included in addition to the fifteen pages of text. Authors should submit a correct PDF file of their paper to be considered and make sure that the file will print on a printer that uses 8.5 x 11 inch size (letter size) paper. The official language of the conference is English.

Manuscript submission procedures are available over the Web at http://www.hipc.org. Electronic submissions must be in the form of a readable PDF file. Manuscripts must be received by May 02, 2005. All manuscripts will be reviewed and will be judged on correctness, originality, technical strength, significance, quality of presentation, and interest and relevance to the conference attendees. Submitted papers may not have appeared in or be under consideration for another conference or a journal.

Submissions received after the due date, exceeding length limit or not appropriately structured may not be considered. Authors may contact the program chair at that address below for further information or clarification. Notification of review decisions will be mailed by July 11, 2005. Camera-ready papers are due August 15, 2005. The conference proceedings will be available at the conference and on the Web after the conference.

IMPORTANT DATES	
May 2, 2005	Conference Paper Due
May 9, 2005	Workshop Proposal Due
May 16, 2005	Tutorial Proposal Due
July 11, 2005	Notification of Acceptance/Rejection
August 15, 2005	Camera-Ready Paper Due
October 3, 2005	Poster/Presentation Summary Due

## MEETING

## INFORMATION

The advance program will be available in July 2005. Check **www.hipc.org** for updated information.

# http://www.hipc.org

# 12th IEEE International Conference on **High Performance Computing**



# December 18 - 21, 2005 • Goa, India

#### **PROGRAM CHAIR**

Professor David A. Bader Department of Electrical and Computer Engineering University of New Mexico Albuquerque, NM 87131 USA Email: dbader@ece.unm.edu

### **PROGRAM VICE CHAIRS**

ALGORITHMS Michael A. Bender, SUNY Stony Brook, USA APPLICATIONS

Zhiwei Xu, Chinese Academy of Sciences, China **ARCHITECTURE** 

Jose Duato, Technical University of Valencia, Spain COMMUNICATION NETWORKS

M. Cristina Pinotti, University of Perugia, Italy

**SYSTEMS SOFTWARE** Satoshi Matsuoka, Tokyo Institute of Technology, Japan

#### BEST PAPER AWARDS

These awards, sponsored by Infosys, will be presented to outstanding contributed papers in two areas: a) Algorithms and Applications and b) Systems.

#### WORKSHOPS

Proposals are solicited for workshops to be held in conjunction with the main conference. Interested individuals should submit a proposal by May 09, 2005 to the Workshops Chair. For additional details and submission procedure visit http://www.hipc.org/hipc2005.

#### WORKSHOPS CHAIR

C. P. Ravikumar, Texas Instruments India, Email: ravikumar@india.ti.com

#### POSTER/PRESENTATION SESSION

In addition to the contributed papers session, a plenary poster/presentation session emphasizing novel applications of high performance computing is planned.It will offer brief presentation time for each poster and will be followed by a "walk-up and talk" setting. To be considered, send a 5 page summary of your work to the Poster/Presentation Chair by October 03, 2005. For additional details contact the Poster/Presentation Chair.

#### POSTER/PRESENTATION CHAIR

Rajeev Thakur, Argonne National Laboratory Email: thakur@mcs.anl.gov

#### TUTORIALS

Proposals are solicited for tutorials to be held at the meeting. Interested individuals should submit a proposal by May 16, 2005 to the Tutorials Chair. The proposal should include a brief description of the intended audience, a lecture outline, and a vita for each lecturer.

#### **TUTORIALS CHAIR**

Srinivas Aluru, Iowa State University Email: aluru@iastate.edu

### EXHIBITS/VENDOR PRESENTATIONS

Companies and R&D laboratories are encouraged to present their exhibits at the meeting. In addition, a full day of vendor presentations is planned. For details, visit www.hipc.org/hipc2005/

## INDUSTRY LIAISON CHAIR

Sudheendra Hangal, Sun Microsystems Email: sudheendra.hangal@sun.com

## PROGRAM COMMITTEE

#### **ALGORITHMS:**

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### **ARCHITECTURE:**

Ricardo Bianchini, Rutgers University, USA Angelos Bilas, University of Crete, Greece Antonio Gonzalez, UPC/Intel Labs, Barcelona, Spain Jose Gonzalez, Intel Labs, Barcelona, Spain David Kaeli, Northeastern University, USA Stefanos Kaxiras, University of Patras, Greece Olav Lysne, Simula Research Laboratory, Norway Li-Shiuan Peh, Princeton University, USA Timothy Mark Pinkston, University of Southern California, USA Anand Sivasubramaniam, Pennsylvania State University, USA Evan Speight, IBM, USA

# Per Stenstrom, Chalmers University of Technology, Sweden **COMMUNICATION NETWORKS:**

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## **SYSTEMS SOFTWARE:**

David Abramson, Monash University, Australia Franck Cappello, University of Paris Sud, France Denis Caromel, Univ. of Nice, CNRS/I3S, INRIA, IUF, France Dennis Gannon, Indiana University, USA Manish Gupta, IBM Research, USA Laxmikant V. Kale, University of Illinois at Urbana-Champaign, USA Vijay Karamcheti, New York University, USA Craig Lee, Aerospace Corp., USA David Lowenthal, University of Georgia, USA Andrew Lumsdane, Indiana University, USA Dhabaleswar K. (DK) Panda, The Ohio State University, USA Steven Parker, University of Utah, USA Joel Saltz, The Ohio State University, USA Mitsuhisa Sato, Tsukuba University, Japan Alan Sussman, University of Maryland, USA