# CALL FOR PARTICIPATION

# 14th IEEE International Conference on High Performance Computing (HiPC 2007)

December 18-21, 2007 Goa, India

http://www.hipc.org

Submission Deadline: May 15, 2007

The 14th annual IEEE International Conference on High Performance Computing (HiPC 2007) will be held in Goa, India, during December 18-21, 2007. 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.

The 13th HiPC Conference held in Bangalore, India, in December 2006, had 52 contributed papers that were selected from over 335 submissions from 40 countries. The conference included technical paper sessions, keynotes from leading HPC researchers, a poster paper session, an exhibition, an industry session with presentations from leading HPC companies, a HPC user community meeting, tutorials on hot topics in computing and networking, and several workshops focused on emerging areas. The 12th HiPC Conference held in Goa, India, in December 2005, had 50 contributed papers that were selected from over 362 submissions from 30 countries, and approximately 300 participants attended the meeting. Further information about HiPC 2007 and the HiPC series of meetings is available on the conference website at http://www.hipc.org.

HiPC 2007 will focus on 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.

#### **CO-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)
- Manufacturers' Association for Information Technology (MAIT)

#### **HELD IN COOPERATION WITH:**

- Goa University
- National Institute of Oceanography, Goa
- Indian Institutes of Technology
- Institute of Technology, Banaras Hindu University, Varanasi
- Software Technology Parks of India
- Tata Institute of Fundamental Research, India

# **VENUE AND MEETING INFORMATION**

Goa, popularly know as the "Rome of the East" and the "Pearl of the Orient" due to its exquisite beaches, magnificent scenic beauty, architectural splendors 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.

The advance program will be available in July 2007. Check the conference website at <a href="http://www.hipc.org">http://www.hipc.org</a> for updated information.

April	07, 2007	Conference Paper Submission Begins
May	15, 2007	Conference Paper Submission Ends
May	14, 2007	Workshop Proposals Due
May	21, 2007	Tutorial Proposals Due
July	16, 2007	Notification of Acceptance/Rejection
August	20, 2007	Camera-Ready Paper Submission
September	24, 2007	Poster/Presentation Summary Due
November	07, 2007	Early Registration Deadline
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# HiPC 2007 CALL FOR PAPERS

Authors are invited to submit **original unpublished** manuscripts that demonstrate current research in all areas of high performance computing including 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:

- High-Performance Computing
- Parallel and Distributed Algorithms
- Parallel Languages and Programming Environments
- Load Balancing, Scheduling and Resource Management
- Fault-Tolerant Algorithms and Systems
- Scientific/Engineering/Commercial Applications and Workloads
- Emerging Applications such as Biotechnology and Nanotechnology
- Cluster and Grid Computing
- Peer-to-peer Algorithms and Networks
- Heterogeneous Computing
- Wireless and Mobile Computing
- Communication/Sensor Networks and Embedded Applications
- Interconnection Networks and Architectures
- Scalable Servers and Systems
- Power-Efficient and Reconfigurable Architectures
- Compiler Technologies for High-Performance Computing
- Software Support and Advanced Micro-architecture Techniques
- Operating Systems for Scalable High-Performance Computing

# **MANUSCRIPT GUIDELINES**

Submitted manuscripts should be structured as technical papers and may not exceed 14 letter size (8.5 X 11) pages including figures, tables and references. Formatting requirements are 12-point font size, single spaced or higher, with margins of at least 1 inch on each of the four sides. Submissions not conforming to these guidelines may be returned without review. Authors should submit the manuscript in PDF format and make sure that the file will print on a printer that uses letter size (8.5 X 11) paper. The official language of the meeting is English.

Manuscript submission will start on April 7, 2007. Manuscript submission procedures will then be available over the Web at <a href="http://www.hipc.org">http://www.hipc.org</a>. Electronic submissions must be in the form of a readable PDF file. Manuscripts must be received by May 15, 2007. 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 the address below for further information or clarification. Notification of review decisions will be mailed by July 16, 2007. Camera-ready papers are due by August 20, 2007. The proceedings will be published by Springer-Verlag, Lecture Notes in Computer Science, and will be available at the conference.

Program Chair: Professor Srinivas Aluru

Iowa State University, USA Email: aluru@iastate.edu

#### **BEST PAPER AWARDS**

Best paper awards, sponsored by Infosys, will be given for 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 14, 2007 to the Workshops Chair. Additional details and submission guidelines will be available at <a href="http://www.hipc.org">http://www.hipc.org</a>.

Workshops Chair: Manimaran Govindarasu

Iowa State University, USA Email: gmani@iastate.edu

#### 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 September 24, 2007. For additional details, contact the Poster/Presentation Chair.

Poster/Presentation Chair: Rajeev Thakur

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

# **TUTORIALS**

Proposals are solicited for tutorials to be held at the meeting. Interested individuals/groups should submit a proposal by May 21, 2007 to the Tutorials Chair. The proposal (5 pages maximum) should include a brief description of the intended audience, a lecture outline, and a vita for each lecturer. For additional details, contact the Tutorials Chair.

Tutorials Chair: Rajeev Sivaram

IBM Corporation, USA Email: rsivaram@us.ibm.com

#### INDUSTRY EXHIBITION

Companies and R&D laboratories are encouraged to present their exhibits at the meeting. Additionally, a full day of vendor presentations is planned. Further details can be obtained at <a href="http://www.hipc.org">http://www.hipc.org</a> or by contacting the Industry Liaison co-chairs.

Industry Liaison Co-Chairs: Ramakrishna K. Govindaraju Raghuram Tupuri

IBM, USA AMD, India

# MINISYMPOSIUM ON HPC TECHNOLOGIES, APPLICATIONS & EXPERIENCE

The minisymposium will bring together providers and users of HPC to provide a forum for presenting the state-of-the-art in HPC platforms and technologies, for discussing best practices and for exchanging experiences. HPC applications and the experiences of application developers will be of special interest to this mini symposium. The minisymposium will consist of invited as well as contributed talks by leading experts from industry, research laboratories and universities, as well as panels and open discussions. For further details and to submit abstract, please visit <a href="http://www.hipc.org">http://www.hipc.org</a>.

Minisymposium Co-Chairs: Ramesh K. Tirumale Raghuram Tupuri

The Boeing Company, USA AMD, India

#### TRAVEL SCHOLARSHIPS FOR STUDENTS FROM INDIA

HiPC 2007 will be awarding travel scholarships to students from Indian Engineering Colleges to encourage them to attend the conference. This merit-based scholarship will cover their travel and accommodation expenses. The last date of application is October 31, 2007. For more details, please visit the HiPC website, <a href="http://www.hipc.org">http://www.hipc.org</a>, or contact the Scholarships Co-Chairs.

Scholarships Co-Chairs: Anu G. Bourgeois Madhusudhan Govindaraju

Georgia State University, USA SUNY Binghamton, USA

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