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CALL FOR PAPERS  
19th IEEE International Conference on High Performance Computing

(HiPC 2012)

December 18-21, 2012

Pune, INDIA

<http://www.hipc.org>

Paper Submission Deadline: May 16, 2012

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IMPORTANT DATES

April 02, 2012	Conference Paper Submission Begins
May 16, 2012	Conference Paper Submission Ends
Mar 1, 2012	Workshop Proposals Due
July 31, 2012	Notification of Acceptance/Rejection
Aug 18, 2012	Camera-Ready Paper Submission
Sep 16, 2012	Student Symposium Submissions Due
Oct 21, 2012	Student Symposium Accept/Reject Decisions
Nov 14, 2012	Early Registration Deadline

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The 19th annual IEEE International Conference on High Performance Computing (HiPC 2012) will be held at the Le Meridian hotel in Pune, India, during December 18-21, 2012. It will serve as a forum for researchers from around the world to present their current research efforts and findings, and will act as a venue for stimulating discussions and highlighting high performance computing (HPC) related activities in Asia. The conference has a history of attracting participation from reputed researchers from all over the world.

HiPC 2012 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 student research symposium, tutorials, and vendor presentations in the industry, user and research symposium. The 18th meeting, held in Bengaluru in December 2011, had 40 contributed papers chosen from 206 submissions from 22 countries, and more than 450 attendees. The 17th meeting, held in Goa in December 2010, had 40 contributed papers chosen from 208 submissions from 22 countries, and more than 280 attendees. The 16th meeting, held in Kochi, India in December 2009, had 49 contributed papers that were selected from 261 submissions from 20 countries, and about 225 participants attended the meeting. Further information about HiPC 2012 and the HiPC series of meetings is available on the conference website at <http://www.hipc.org>.

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CO-SPONSORED BY:

- \* IEEE Computer Society Technical Committee on Parallel Processing (TCPP) - Pending
- \* HiPC Education Trust

IN COOPERATION WITH:

- \* ACM Special Interest Group on Computer Architecture (SIGARCH) - Pending
  - \* European Association for Theoretical Computer Science - Pending
  - \* IFIP Working Group on Concurrent Systems - Pending
  - \* National Association of Software and Service Companies (NASSCOM) - Pending
  - \* Manufacturers' Association for Information Technology (MAIT) - Pending
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VENUE AND MEETING INFORMATION

HiPC will be held at Pune, India. The advance program will be available in early August 2012. Please check the conference website at <http://www.hipc.org> for updated information.

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HiPC 2012

CALL FOR PAPERS  
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Authors are invited to submit original unpublished research 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/Systems
- > Parallel Languages and Programming Environments
- > Hybrid Parallel Programming with GPUs and Accelerators
- > Load Balancing, Scheduling and Resource Management
- > Resilient/Fault-Tolerant Algorithms and Systems
- > Scientific/Engineering/Commercial Applications and Workloads
- > Emerging Applications such as Biotechnology and Nanotechnology
- > Cluster, Cloud, and Grid Computing
- > Heterogeneous Computing
- > Interconnection Networks and Architectures
- > Scalable Servers and Systems

- > High Performance/Scalable Storage 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

One or more best paper awards will be given for outstanding contributed papers. Further details about call for student research symposium, workshops, tutorials, and exhibits, as well as submission guidelines are available at the conference website <http://www.hipc.org>.

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## MANUSCRIPT GUIDELINES

Submitted manuscripts should be structured as technical papers and may not exceed 10 letter size (8.5 x 11) pages including figures, tables and references using the IEEE format for conference proceedings (print area of 6-1/2 inches (16.51 cm) wide by 8-7/8 inches (22.51 cm) high, two-column format with columns 3-1/16 inches (7.85 cm) wide with a 3/8 inch (0.81 cm) space between them, single-spaced 10-point Times fully justified text).

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 02, 2012. Manuscript submission procedures will then be 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 16, 2012. Manuscripts should demonstrate current research in any area of high performance computing. 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 must represent original unpublished research that is not currently under review for any other conference or journal. Papers not following these guidelines will be rejected without review and further action may be taken, including (but not limited to) notifications sent to the heads of the institutions of the authors and sponsors of the conference. Submissions received after the due date, exceeding length limit, or not appropriately structured may also 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 31, 2012. Camera-ready papers are due by August 18, 2012. A published proceedings will be available at the conference.

Program Chair:

Dhabaleswar K. (DK) Panda

Ohio State University, USA

Email: panda at cse.ohio-state.edu

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## WORKSHOPS

Proposals are solicited for workshops to be held in conjunction with the main conference. Interested individuals should submit a proposal by March 1, 2012 to the Workshops Chair. Additional details and submission guidelines will be available at the conference website.

### Workshops Co-Chairs:

Pavan Balaji

Argonne National Laboratory, USA

Email: balaji at mcs.anl.gov

Manimaran Govindarasu

Iowa State University, USA

Email: gmani at iastate dot edu

Chiranjib Sur

IBM, India

Email: chiranjib.sur at in dot ibm dot com

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## STUDENT RESEARCH SYMPOSIUM

HiPC 2012 will feature the Fifth Student Research Symposium (SRS) on High Performance Computing (HPC) aimed at stimulating and fostering student research, and providing an international forum to highlight student research accomplishments. The symposium will also expose students to the best practices in HPC in academia and industry. The one-day symposium will feature brief presentations by student authors on their research, followed by a poster exhibit. Short invited talks by leading HPC researchers/practitioners will be part of the program. The HiPC Conference Reception and Student Symposium Poster Exhibits will provide an opportunity for students to interact with HPC researchers, practitioners and recruiters from academia and industry. To be considered, students should submit a 5 page extended abstract of their research. Submissions will be reviewed and evaluated by the program committee for technical quality, innovative contributions, and presentation. Submission instructions will be available at the Student Symposium web site, accessible from <http://www.hipc.org> after August 15, 2012. For additional details, please visit the conference web site or contact the Symposium Co-Chairs.

### Symposium Co-Chairs:

Ashok Srinivasan

Florida State University

Email: ashokpriya at yahoo dot com

Yogesh Simmhan

University of Southern California

Email: simmhan at usc dot edu

Symposium Coordinator:

Kishore Kothappalli

IIT Hyderabad

Email: kkishore at iit dot ac dot in

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INDUSTRY, RESEARCH AND USER SYMPOSIUM (IRUS)

The HiPC Industry/User Symposium aims at bringing together the users / practitioners of HPC including both commercial and non-commercial users, and giving them a platform to share their challenges and successes, as well as to discuss relevant technology issues.

Symposium IRUS Co-Chairs:

Jigar Halani

Wipro, India

Email: jigar.halani at wipro dot com

Vipin Chaudhary

CRL, India

Email: vipinc at gmail dot com

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HiPC 2012 ORGANIZATION

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Steering Committee 2012 membership also includes the general co-chairs, program chairs and vice general co-chairs from 2011, 2012 and 2013.