



## 20<sup>TH</sup> INTERNATIONAL CONFERENCE ON HIGH PERFORMANCE COMPUTING (HiPC 2013)

December 18-21, 2013 | Bengaluru (Bangalore), India | [www.hipc.org](http://www.hipc.org)

The conference venue for HiPC 2013 has been relocated to the Park Plaza Bengaluru Hotel in Bengaluru (Bangalore). The HiPC Website at [www.hipc.org](http://www.hipc.org) gives details for this change and also will provide details for booking accommodations at the Park Plaza.



### PROGRAM HIGHLIGHTS

The 20th IEEE International Conference on High Performance Computing (HiPC 2013), will be held in Bengaluru (Bangalore), India, **December 18 - 21, 2013**, will serve as a forum for presenting current work by researchers from around the world as well as to highlight activities in Asia in the area of high performance computing.

#### KEYNOTE SPEAKERS

##### › IVO BOLSENS

Senior Vice President & Chief Technology Officer, Xilinx Research Laboratories

**THE ALL PROGRAMMABLE SOC FPGA AT THE HEART OF PROGRAMMABLE SYSTEMS**

##### › IAN BUCK

General Manager, GPU Computing Software, NVIDIA

**GPU COMPUTING, PAST, PRESENT, AND FUTURE**

##### › ROBERT J. HARRISON

Institute for Advanced Computational Science, Stony Brook University and Center for Scientific Computing, Brookhaven National Laboratory

**BIG SCIENCE, BIG DATA, BIG COMPUTE**

#### CONTRIBUTED PAPERS

The technical program will consist of 49 contributed papers chosen from 196 submissions from all over the world. The papers will be presented in a single-track format covering important and timely topics such as performance consistency, virtualization, fault tolerance and power management for large scale HPC and Cloud infrastructures, routing, and programming support, shared memory abstractions and applications for multi-core and GPU systems.

#### STUDENT RESEARCH SYMPOSIUM

The conference will feature the 6<sup>th</sup> Student Research Symposium on High Performance Computing on December 18 aimed at stimulating and fostering student research and providing an international forum to highlight student research accomplishments. The one-day symposium will feature brief presentations by student authors on their research and a poster exhibit, and will be followed by a reception and industry-student mixer.

#### WORKSHOPS

As part of the conference, HiPC will host 2 workshops on December 18.

- › International Workshop on Cloud Computing Applications (IWCA)
- › Workshop on Performance Engineering and Applications (WPEA)

#### CO-SPONSORS



#### IN COOPERATION WITH



Association for  
Computing Machinery

**INDUSTRY, RESEARCH AND USERS SYMPOSIUM**

The symposium will bring together practitioners and users including both commercial and non-commercial 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. To be held on December 19 and 20, it will feature two sessions with presentations from international experts, focusing on the following topics:

- > HPC and Big Data Challenges
- > HPC Challenges in CFD in India

**INDUSTRY/RESEARCH EXHIBITS**

This two-day exhibition session, to be held on December 19 and 20, will consist of exhibits and presentations from vendor companies and R&D laboratories.

**CONFERENCE REGISTRATION**

Conference registration includes attendance at all workshops and technical sessions and a copy of the HiPC 2013 proceedings. The early registration deadline for discounted fees is **November 14, 2013**. International attendees are advised to start the process for their registration and application for a travel visa as soon as possible. Visit the conference website for further details.

**INFORMATION FOR INDIA-BASED PARTICIPANTS**

Registration at reduced rates is made possible for India-based faculty, students, and researchers through sponsorships from India based industries and organizations. Travel scholarships for India-based students are available on a merit basis to promote HPC research in India.

**BIRDS-OF-A-FEATHER**

The conference will feature several Birds-of-a-Feather sessions on a number of contemporary topics. Further details will be made available on the HiPC web site.

**SPONSORSHIP OPPORTUNITIES**

The HiPC conference is annually sponsored by several Indian and international organizations, institutions, and companies. Please visit sponsorship opportunities for more details and the sponsors' page for the list of current sponsors at [industry@hipc.org](mailto:industry@hipc.org).

For further details, visit the conference website at [www.hipc.org](http://www.hipc.org).

**CONFERENCE ORGANIZATION****GENERAL CO-CHAIRS**

RAMAMURTHY BADRINATH, HP, India  
RAMA GOVINDARAJU, Google, USA

**PROGRAM CHAIR**

YVES ROBERT, ENS Lyon, France

**STEERING COMMITTEE CHAIR**

VIKTOR K. PRASANNA  
Univ. of Southern California, USA

**PROGRAM VICE CHAIRS**

Algorithms: DENIS TRYSTRAM, INRIA Grenoble, France

Applications: XIAOYE S. LI, Lawrence Berkeley National Laboratory, USA

Architecture: MITSUHIISA SATO, University of Tsukuba, Japan

System Software: THOMAS HÉRAULT, University of Tennessee, Knoxville, USA

HiPC 2013 is supported at various levels by the following organizations

**TITANIUM SPONSORS****PLATINUM SPONSORS****GOLD SPONSORS**