HiPC 2011 Student Research Symposium

Message from the co-chairs

Welcome to the proceedings of the third Student Research Symposium at the International Conference on High Performance Computing (HiPC), 2011. This symposium continues the first three symposia held at HiPC in 2008, 2009, and 2010, aimed at providing a premier forum in India for stimulating and fostering student research, and offering an international forum to highlight student research accomplishments. The symposium exposes students to the best practices in high performance computing (HPC) in academia and industry, and allows them to network with their peer group in India.

This year, we received 51 submissions from seven countries. Of these, we were able to accept 21 high quality papers that were presented and another 18 as posters. Each manuscript was reviewed by two or more members of our international Technical Program Committee. A separate awards committee is tasked with selecting authors for Best Paper, Best Poster, and Best Presentation awards, sponsored by ANSYS. We summarize below some statistics related to the review process.

Submission Origin	Submissions	Accepted Papers	Accepted Posters
India	40	15	14
Asia, except India	6	3	3
North America	3	2	1
Others (Australia)	2	1	0
Total	51	21	18

In addition to research papers and their presentation, poster exhibits constitute an important component of the symposium. This year, we have organized additional activities in the symposium to enhance its value to students attending the symposium. In particular, it features invited talks by two distinguished experts in the field. In future years, we expect to include activities that will further promote interactions and cross-pollination among students and the broader research community research, and continue to offer an international venue to showcase student research in HPC.

We wish to thank a number of people for their help in organizing this workshop. The Technical Program Committee, listed on the next page, performed a thorough review of the manuscripts within a brief time to allow us to complete our selection on schedule. Satoshi Matsuoka, the HiPC TPC chair, helped us set up the EDAS conference management system. Animesh Pathak was always prompt in maintaining our web pages up to date, despite the numerous requests that we made. We acknowledge Jigar Hilani for his help with publicity. We thank the HiPC Steering Committee chair, Viktor K. Prasanna, and the HiPC co-chairs Manish Parashar and Rajeev Muralidhar for their numerous suggestions in deciding on the format of the symposium. Finally, we thank ANSYS for sponsoring the symposium awards.

December 2011

Yogesh Simmhan General Co-Chair University of Southern California, USA Ashok Srinivasan General Co-Chair Florida State University, USA

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Technical Program Committee

1.	Keith	Bisset	Virginia Polytechnic Institute and State University, USA	
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3.	Surendra	Byna	Lawrence Berkeley National Lab, USA	
4.	Dinesh	Kaushik	King Abdullah University of Science and Technology, Saudi Arabia	
5.	Wei	Lu	Microsoft Research, USA	
6.	Kamesh	Madduri	Lawrence Berkeley National Lab, USA	
7.	Ravi	Madduri	Argonne National Lab, USA	
8.	Amitava	Majumdar	San Diego Supercomputer Center, USA	
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10.	Srinath	Perera	WSO2, Sri Lanka	
11.	Kalyan	Perumalla	Oak Ridge National Lab	
12.	Subhash	Saini	National Aeronautics and Space Administration, USA	
13.	Yogesh	Simmhan	University of Southern California, USA (co-chair)	
14.	Ashok	Srinivasan	Florida State University, USA (co-chair)	
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19.	Abhinav	Vishnu	Pacific Northwest National Lab, USA	
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21.	Joseph	Zambreno	Iowa State University, USA	
22.	Daniel	Zinn	University of California at Davis, USA	