The IPDPS PhD Forum was initiated by the IEEE Computer Society's Technical Committee on Parallel Processing as part of its mission to promote parallel processing research and education, especially at the PhD level. Under the leadership of the TCPP chair Sushil K. Prasad, the first PhD Forum took place at IPDPS 2008 in Miami. Based on the supportive reception that year, it was repeated in 2009 in Rome, with Yves Robert serving as chair. His prior experience as a program chair for the IPDPS conference program helped to formulate a technical framework for making the PhD Forum a regular part of IPDPS events starting from 2010 in Atlanta, under the co-direction of Manish Parashar and Luc Bougé, continuing in 2011 in Anchorage with Luc Bougé serving as chair. This year in Shanghai, the PhD Forum is co-chaired by Luc Bougé and Bo Hong.

The IPDPS PhD Forum offers students an opportunity to present a research poster describing their ongoing dissertation research to the entire IPDPS conference audience, to discuss their research with experts from academia and industry during the conference, and to make useful contacts with prospective employers as they enter the job market. A key objective of the PhD Forum is to help students receive expert feedback on their research thrusts, and at the same time give representatives from industry and academia a preview of the upcoming developments in parallel and distributed processing and related technologies.

Starting from 2010, the PhD Forum submissions have included a four-page paper describing the student’s dissertation proposal and preliminary results. The authors were required to make explicit the number of years enrolled and the studies completed in their PhD program, so that the reviewers could take into account this additional information. Also, a formal endorsement letter from the PhD advisor was required.

A scientific committee evaluated 50 submissions, and selected 24 for presentation at IPDPS 2012 in Shanghai. This committee was gathered by a "call for voluntary reviewers" to the conference PC members, who also nominated junior colleagues to participate in the review. This was very appropriate, given that the targeted PhD students are most probably tomorrow's submitters to the main IPDPS conference, and possibly the day-after-tomorrow's reviewers! As expected, several of the submissions originated from the PhD students of those colleagues, so considerable care was given to avoid any conflict of interest in the selection process. Each submission received three reviews. The reviewers were especially careful to assess the scientific quality of the PhD proposal with respect to the number of years spent in the PhD program, as it was explicitly mentioned. We cannot emphasize enough our appreciation to all of these colleagues for their contribution to building the IPDPS community of tomorrow.

As begun in 2010, the selected submissions are being published as individual contributions along with the proceedings of the IPDPS Workshops, which will be available through the IEEE Computer Society Digital Library. We are grateful to Xin Yuan, proceedings chair, for supporting and facilitating this opportunity for PhD Forum student authors. Also, the selected PhD students were eligible to apply for travel assistance grants offered by the IPDPS sponsor TCPP, the IEEE Computer Society’s Technical Committee on Parallel Processing. In 2012, Chinese students participating in the PhD Forum were also eligible to apply for the additional travel funds offered by SJTU.
We hope that IPDPS attendees will take time to review the student posters here in Shanghai during the Forum, and also to discuss the research with the student presenters. A special thanks goes to general co-chairs Minglu Li and Cho-li Wang who organized the conference space and program to give strong coverage to the PhD Forum and to program co-chairs Leonid Oliker and Katherine Yelick who facilitated review participation from the program committee. We really appreciated their support, as well as all the help from the local arrangements co-chairs Susamma Barua and Hongzi Zhu, who saw to all the practical details associated with the poster presentations. We also want to give honorable mention to the publicity team of Michela Taufer, Alexandros Stamatakis, Yinglong Xia, and Yanmin Zhu. As in the previous years, it is our special pleasure to thank Sally Jelinek, production chair, for her special attention and care. We also thank Yanmin and other Chinese colleagues for distributing the Chinese version of the CFP. With their help, we received a significant number of submissions from PR China. It has been our pleasure to be part of the IPDPS team who made it very easy to do the job.

There are many members of the IPDPS community too many to name without missing someone important whose encouragement and advice have been critical to this venture, and we thank the steering co-chairs Viktor Prasanna and George Westrom for their leadership. Of course, the students who submitted their research, as well as all of the reviewers who with great dedication gave their time and expertise to select the posters, have our greatest gratitude; you are to be credited with producing a solid PhD Forum for IPDPS 2012. Many thanks to all!

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