Welcome to the proceedings of APPT 2011, which was held in Shanghai! With the continuity of Moore’s law in the multicore era and the emerging cloud computing, parallelism has been pervasively available almost everywhere, from traditional processor pipelines to large-scale clusters. This creates grand challenges to architectural and system designs, as well as to methods of programming these systems, which form the core theme of APPT 2011. The two-day technical program of APPT 2011 provided an excellent venue capturing the state of the art and practice in parallel architectures, parallel software and distributed and cloud computing.

This biennial event provides a forum for representing this community’s research efforts and exchanging viewpoints. We would like to express our thanks to all colleagues who submitted papers and congratulate those whose papers were accepted. As an event that has taken place for 16 years, APPT aims at providing a high-quality program for all attendees. We accepted 13 papers out of 40 submissions, presenting an acceptance rate of 32.5%.

To ensure a high-quality program and ensure interactive discussions, we made authors aware of the existence of a pre-filtering mechanism. We read all submissions, filtered those without enough technical merit before passing them to the Program Committee (PC). In total, we rejected three papers in this round. Then, each remaining submission got reviewed by at least three PC members. Many submissions were reviewed by four or five PC members, which yield high-quality reviews for each submission. Finally, an online PC meeting was held during July 4–8, to reach consensus for each submission.

In addition to the authors, we would also like to show our sincere appreciation to this year’s dream-team PC. The 36 PC members did an excellent job in returning high-quality reviews in time. This ensured timely delivery of the review results to all authors.

Finally, we would like to thank the efforts of our General Chair (Xuejun Yang), our conference coordinator (Yong Dou) and the support of our industry sponsor (Intel), the Special Interests Group of Computer Architecture in China Computer Federation, and National Laboratory for Parallel and Distributed Processing, China. Our thanks also goes to Springer for its assistance in putting the proceedings together. Their help made APPT 2011 a great success.

September 2011

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Pen-chung Yew
Binyu Zang
Organization

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NUDT, China

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