

# Message from the MSPC 2012 Program Chair

Welcome to the 2012 ACM SIGPLAN Workshop on Memory Systems Performance and Correctness (MSPC). I greatly appreciate the opportunity to serve as the program chair for this year's workshop. I hope that this year's workshop continues the interdisciplinary tradition and success of six previous MSPC incarnations, especially with the strong contributions and participation of multiple research and industrial communities, spanning programming languages, compilers, systems, and computer architecture.

Memory continues to be a major bottleneck in almost all computing systems. This year's workshop takes place at an exciting time when memory is becoming even more of a computing system bottleneck: more and increasingly diverse processing cores and agents are sharing parts of the memory system; applications that run on the cores are becoming increasingly data and memory intensive; memory is consuming significant energy and power in modern systems; and, there is increasing difficulty scaling the well-established memory technologies, such as DRAM, to smaller technology nodes. As such, managing memory in significantly better ways at all levels of the transformation hierarchy, including both the software and hardware levels, is becoming even more important. Techniques or combinations of techniques that integrate the best ideas cooperatively at multiple levels together appear promising to solve the difficult performance, energy efficiency, correctness, security and reliability problems we face in designing and managing memory systems today. In this interdisciplinary spirit, this year's workshop features new ideas and research results from researchers working on solving memory system related issues using software, hardware, and software/hardware cooperative techniques. I certainly hope the variety of ideas and approaches presented at MSPC 2012 will spark significant discussion among the attendees as well as future readers of the published papers.

This year, we received 21 complete submissions (out of the 26 abstracts started), 16 of which were full-length papers and five of which were short (two-page) position/poster papers. The program committee selected seven of the full-length papers for full-length presentation and three of the short papers for short poster presentations. One full-length paper submission was accepted as a short poster presentation.

Almost all submissions received a minimum of six reviews, and all submissions received at least five reviews, with an average of 5.95 reviews per paper. All papers were reviewed by at least five of the 25 Program Committee (PC) members, which consisted of experts in programming languages, compilers, systems, distributed computing, and computer architecture, especially with respect to issues related to the memory system. Before the PC meeting, I asked the PC members to discuss the papers online and discuss differences of opinion. 16 of the 21 submissions received significant online discussion during the week leading up to the PC meeting. Any PC member was allowed to review and participate in the discussion of any submission he/she did not have a conflict of interest with. Only one PC-authored paper was submitted this year, as a short paper, and it was accepted.

The Program Committee met on April 21, 2012, through a conference call that lasted for approximately three hours. 21 of the 25 PC members were present in the meeting. Every submitted paper was given an opportunity for discussion. 16 of the submissions were discussed thoroughly. I am very grateful for the hard work, professionalism, fairness, and through reviews of the PC members during the entire review and PC meeting process for MSPC 2012, which I hope has resulted in the fair, exciting, and diverse program you are reading.

Many people contributed to making MSPC 2012 possible. I would first like to thank the authors for the strong, interesting, and diverse submissions, and taking the reviewer feedback into account when preparing their final versions. I would also like to thank Professor Erez Petrank of Technion for accepting my invitation to deliver one of the ISMM/MSPC Joint Invited Talks. Second, I would like to thank the Program Committee members for their dedicated efforts in reviewing and discussing submissions, and shaping the bulk of the technical program. I also thank the external reviewers who assisted the Program Committee. Third, I would like to thank my PhD students Chris Fallin, Vivek Seshadri, and Justin Meza for maintaining the MSPC website and paper submissions and review website. I would like to thank Laura McGee for her help with PC meeting arrangements and Adrienne Griscti of ACM for her assistance with proceedings and digital library. Finally, I would like to thank our General Chair, Lixin Zhang, for handling the logistics related to the conference.

I hope you enjoy MSPC 2012. I welcome any feedback you may have on anything related to MSPC 2012.

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