

Message from the Program Chairs

IISWC 2020

On behalf of the Program Committee, we are pleased to present the technical program of IISWC 2020!

The main technical program consists of two keynotes and 26 technical papers. This year, we are excited to have Vivek Sarkar (Georgia Tech) and Margaret Martonosi (NSF/Princeton) as our keynote speakers. We thank Vivek and Margaret for agreeing to share their perspectives and insights with the workload characterization community.

This year, we received 70 paper submissions, covering a variety of topics from core computer architecture to the Internet of Things (IoT) and quantum computing. We received submissions from all major types of research institutions (academia, industry, government research labs, and computing centers).

The program committee (PC) of 49 members reviewed the submissions via a single-round, double-blind review process. Almost all submitted papers received five reviews (a few received four reviews). The program committee met virtually on August 14, 2020 to discuss the papers and finalize the selection of papers for the technical program. The PC meeting attendance varied during the course of the meeting, but more than 85% of the PC members attended the PC meeting despite timezone challenges.

At the start of the PC meeting, the PC were encouraged to welcome papers which contained fresh and insightful ideas. We did not suggest a target acceptance rate. Each paper discussion was typically led by the most positive PC reviewer present at the meeting. After discussion, the PC reviewers voted to accept or reject a paper. If no strong consensus could be reached, the paper advanced to a PC-wide discussion, followed by a decision based on a PC-wide majority vote. Before the PC-wide was cast, the whole PC was given a chance to ask clarifying questions and listen to a summary from the most positive and negative reviewers. PC members with a conflict of interest with any paper author were excused from the discussion using Zoom’s waiting-room function. For any conflict with one of the PC Chairs, the review and discussion of the paper was handled by the other PC Chair.

Overall, the PC discussed 38 papers for over 8.5 hours. The outcome for the other 32 papers was reached by consensus without requiring an online discussion. The decision for some of the discussed papers was also reached by consensus, but these papers were discussed in the PC meeting for calibration purposes. All PC members were provided a chance to ask the PC chairs to discuss a particular paper they reviewed. In the end, the PC accepted 26 papers out of 70 submissions. All papers were assigned a lead who wrote the PC discussion summary (for the papers discussed during the PC meeting) or PC feedback (for the rest of the papers) following the templates provided by the PC chairs.

This year, we introduced and experimented with three new features:

1. Removal of a weak reject rating: The review scale consisted of “Strong Accept”, “Accept”, “Weak Accept”, “Reject”, and “Strong Reject”. We introduced this feature to set a more positive tone for the overall review and decision process. The overall result of this experiment was positive and a large fraction of the papers (~17%) were accepted with consensus (all positive ratings).

2. Tools/Benchmarks papers: This year, we specifically welcomed tools/benchmark papers. Unlike regular research papers, the primary contribution of such papers is to describe the design, development, and evaluation of new open-source tools/benchmarks suites. This feature was introduced to specifically encourage contributions from authors who design and deploy open-source practitioners’ tools. The same quality standard and the PC was used to review such papers. This experiment was a success: ~28% of the total submitted papers were under this category and these submissions were a major contributing factor toward an increased number of submissions from past years. The acceptance rate of the papers in this category was similar to the regular papers.

3. Optional supplemental information about the revision: Similar to a few other conferences, we provided the authors an option to upload a document listing how they have revised and improved the submission based on the

feedback of previous submissions. We provided an additional option to set its visibility to the PC chairs only or all the reviewers. This experiment was introduced to reduce the reviewing load and make the cross-conference reviewing more efficient. This experiment was only moderately successful and only one submission used this option using the all-reviewers visibility option.

We would like to thank Tirthak Patel from Northeastern for handling the paper submission system and for his assistance with organizing and running the meeting. We would also like to thank the Steering Committee that provided important and timely feedback on our call for papers and paper deadlines. We would like to acknowledge the members of the organizing committee for their support of program committee activities. In particular, we must thank the general chairs Lei Liu and Lixing Zhang for their collaborative help, the publicity chairs Amro Awad, Dezun Dong, Jingwen Leng, Shuang Chen, Xiaoli Gong and Zhenman Fang for spreading the call for papers to the community, the webchair Xinglei Dou for providing timely updates on the program, and to the Publication Chair Shigang Li for ably handling the production of the proceedings.

The IISWC 2020 program is the result of the hard work of the committee members, with significant representation from the US, Europe and Asia, who volunteered an incredible amount of their time to review papers and virtually attend the program committee meeting. We greatly appreciate their professionalism, their dedication, and their invaluable assistance in putting together the IISWC 2020 program. Also, we would like to recognize the members of our community who have agreed to be session chairs during the conference. Thank you to all the authors who chose to submit their works to IISWC amidst a global pandemic. Although the global pandemic has prevented us from meeting in-person, we hope you enjoy the IISWC 2020 virtual program and we look forward to seeing you online!

Devesh Tiwari and David Kaeli
IISWC 2020 Program Co-Chairs