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ACM SIGMETRICS 2023 Student Research Competition

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Every year, the Association for Computing Machinery (ACM) spearheads a series of Student Research Competitions (SRCs) at ACM-sponsored or co-sponsored conferences. These SRCs provide graduate (Masters or PhD program) and undergraduate students an opportunity to present their original research to a panel of judges. Participating students present posters and oral presentations of their research for the opportunity to win cash prizes. In each category (graduate and undergraduate), the 1st, 2nd, and 3rd place winners receive prizes of \$500, \$300, and \$200, respectively. Additionally, first place undergraduate and graduate student winners from the SRCs held during the year are invited to present their work at the SRC Grand Finals, where a different panel of judges evaluates these winners against each other.

Between June 20-22, 2023, the 2nd ACM SIGMETRICS Student Research Competition (SRC) was held in conjunction with ACM SIGMETRICS 2023 in Orlando. Graduate and undergraduate students were encouraged to submit extended abstracts covering their work on topics related to the scope of ACM SIGMETRICS, including (but not limited to) performance modeling, analysis, optimization, and measurement. The submitted papers covered a wide array of topics. Each of the 14 submissions was reviewed by 3 members of the program committee, and a total of 9 submissions were selected for presentation at the ACM SIGMETRICS 2023 SRC: 4 in the undergraduate category, and 5 in the graduate category.

The actual SRC proceeded in two phases. In the first phase, participants presented their work in a two-hour poster session on June 20th, 2023, where each poster was evaluated by at least three judges. Posters were evaluated on the basis of their oral presentation, visual presentation, research methods, and the significance of the contribution. All participants proceeded to the second phase of the SRC (the semi-finals), which took place on June the 22nd, 2023. In two parallel sessions, the participants were asked to give an oral presentation of their research. In this phase, contestants were evaluated on their knowledge of their research area, the contribution of their research, and the quality of their presentation.

There were 15 judges at the poster and presentation sessions; for the presentations, 7 of them judged the graduates and 6 judged the undergraduates. From this process, the following winners were selected:

Graduate Category:

- 1st place** Isaac Grosf (Carnegie Mellon University) – The RESET Technique for Multiserver-Job Analysis
- 2nd place** Yuanyuan Li (Northeastern University) – Distributed Experimental Design Networks
- 3rd place** Zifeng Niu (Imperial College London) – Graph Learning based Performance Analysis for Queueing Networks.

Undergraduate Category:

- 1st place** Tianhao Huang (Shanghai Jiao Tong University) – An End-to-End Benchmarking Tool for Analyzing the Hardware-Software Implications of Multi-modal DNNs
- 2nd place** Xiangan He (Boston College) – Zephyr: An Economically Feasible, Zero-Knowledge Light Client for Enhanced Blockchain
- 3rd place** Nishat Ahmed (The Cooper Union for the Advancement of Science and Art) – Best Practices for Exoskeleton Evaluation Using DeepLabCut.

This special issue of Performance Evaluation Review (PER) includes (revised) abstracts from the contestants, in the order of their oral presentation at the conference, graduate category first.

We sincerely thank each of the speakers for their presentation and participation in the second ACM SIGMETRICS SRC (and first physical one), as well as the other SRC attendees. We also sincerely thank the SRC program committee: Jussara Almeida, Martin Arlitt, Giulia Fanti, Daniel Figueiredo, Luoyi Fu, Matthieu Jonckheere, and Benny Van Houdt, whose diligent work and effort made it possible to successfully wrap up the review process in about three weeks. Our gratitude goes to the judges for their support and help at the conference and the feedback they gave on the SRC: Florin Ciucu, Céline Comte, Giulia Fanti, Nicolas Gast, Adwait Jog, Eytan Modiano, Shaolei Ren, Ziv Scully, Evgenia Smirni, Abel Souza, Lili Su, Adam Wierman, Qiaomin Xie, Jiaming Xu, and Lishan Yang.

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