Message from the Program Committee Chairs

Welcome to the 35th IEEE International Symposium on Computer Architecture and High Performance Computing, SBAC-PAD 2023, in Porto Alegre, Brazil. The conference is sponsored by the Brazilian Computer Society (SBC) and the IEEE Computer Society through two of its technical committees: the Technical Committee on Computer Architecture (TCCA), and the Technical Committee on Parallel Processing (TCPP).

Alternating between being hosted in Brazil and the rest of the world, SBAC-PAD is a well-established annual international conference series that aims to bring the research communities of these two regions closer together. SBAC-PAD also offers a unique view by focusing on both hardware and software for different kinds of scalable computing. Rather than limiting its focus to a single subdomain, this broader approach fosters more cross-discipline interactions which help drive the cross-pollination of ideas.

Headlining the conference are three keynote speakers, one per day. On Wednesday, Ivona Brandić from the Vienna University of Technology discussed the *Benchmarking of Hybrid Computational Continuum*. Thursday featured Bronson Messer from the Oak Ridge National Laboratory with his presentation on *Frontier: The World's Most Powerful Computer for Science*. Friday concluded the conference with Alba Melo giving insights into *Structural and Multiple Biological Sequence Comparisons in HPC Platforms*.

The conference this year had 68 paper submissions of which 23 were ultimately accepted. Our rigorous two-phase review process ensured that each paper received at least three double anonymized reviews with papers receiving an average of four such reviews. A rebuttal phase gave the authors an opportunity to respond to the reviewer's comments and correct any misunderstandings from the reviewers enabling a more robust reviewing process. After the rebuttal, the reviewers considered the rebuttals and made their final recommendations. This improved the review and resulting paper quality. All papers were discussed at a PC meeting prior to final decisions being made by all seven PC chairs. A shepherding process was employed for papers with novel contributions but that required changes identified through the reviewing process as necessary for final acceptance

The papers were submitted to one of five tracks: Computer Architecture; Distributed Systems, Networking, and Storage; Parallel Applications and Algorithms; Performance Evaluation, and; System Software. Each had a track chair and its own track program committee, which combined formed this year's 80-strong Program Committee. In addition to geographical distribution (PC members belong to institutions from 22 different countries), we also worked to ensure gender, racial, institutional type (academia, research laboratories, and industry), and career phase diversity as much as possible.

SBAC-PAD was co-located with three workshops. The full-day HPC/DL Workshop that focused on High Performance Computing and Deep Learning ran in parallel with two half-day workshops: WAMCA, the Workshop on Applications for Multi-Core Architectures, and WCC, the Workshop on Cloud Computing. All of these also shared English as the conference

language. Also taking place in parallel with SBAC-PAD are a number of other scientific events under the umbrella of the Simpósio em Sistemas Computacionais de Alto Desempenho (WSCAD), a predominantly Portuguese language conference (with some presentations in English) on high performance computing. These provide a forum for both young researchers to share experiences and the community to discuss early research results.

We wish to first thank the SBAC-PAD Steering Committee and its chair Lucia Drummond, and the General Chairs, Tiago Ferreto, Dalvan Griebler, and César De Rose for their support, help, and trust in our abilities to drive the conference program. Special thanks to Krishna Kavi, Fabíola Greve, Bertil Schmidt, Rafael Ferreira Da Silva, and Josef Spillner, for their dedication and commitment as PC chairs for the respective tracks on: Computer Architecture; Distributed Systems, Networking, and Storage; Parallel Applications and Algorithms; Performance Evaluation, and; System Software. We also thank the 75 PC members for their efforts, time, and informative reviews enabling us to build a quality program from the submissions received. Our additional thanks go to the Publications Chair, Marcio Castro, and the IEEE CPS team for ensuring the timely publication of the conference proceedings. Recognition too for the publicity team chaired and led by Carla Osthoff.

As a result of the hard work of all of these people, on their behalf, we are proud to be able to offer an outstanding program, including 3 keynote talks, 8 sessions of technical papers that cover the 5 tracks, and 3 workshops that explore a range of timely and highly relevant topics.

Jay Lofstead, **SBAC-PAD '23 Program co-Chair**
Sandia National Laboratories,
Albuquerque, NM, USA

Vinod Rebello, **SBAC-PAD '23 Program co-Chair**
Universidade Federal Fluminense,
Niterói, RJ, Brazil