ICPE 2023 Chairs' Welcome Message

It is our great pleasure to welcome you to the *14th annual ACM/SPEC International Conference on Performance Engineering (ICPE 2023)* and to the cultural city of Coimbra - located in the center of Portugal, known as *A cidade dos estudantes* (the city of the students), and hosting the oldest University in Portugal and of Portuguese language, the University of Coimbra.

The International Conference on Performance Engineering (ICPE) originated 14 years ago from the fusion of the ACM Workshop on Software Performance (WOSP Est. 1998) and the SPEC International Performance Engineering Workshop (SIPEW Est. 2008). Since then, ICPE has been the leading international forum for presenting and discussing novel ideas, innovations, trends and experiences in the field of performance engineering.

Performance, energy efficiency and reliability are becoming central to the acceptance and sustainability of modern computing systems. However, they are also becoming more and more challenging to achieve. The computing systems are constantly growing in complexity and becoming more tightly integrated in human interaction, which makes their behavior more complex and therefore more difficult to engineer and understand. We need to be able to manage this complexity so that our systems remain reliable, trustable and performant.

This year we have received 67 submissions across the Research, Industry, and Emerging Research tracks. Each submission received at least three reviews from the program committee members. Through a rigorous review process, including a rebuttal phase, a discussion period and program committee meetings, where the leading reviewers guide the online discussion about the individual papers, we have selected the most meritorious papers to create a diverse and interesting conference program. In the research track, 15 out of 46 submissions were accepted as full papers, yielding a full paper acceptance rate of 32.6%. In the industry track, 4 full papers have been accepted out of 8 submissions. 9 submissions were accepted as emerging research papers. 4 full papers received an ACM artifact badge after the subsequent review process in the artifact evaluation track: 2 papers received the "functional" badge and 2 papers received the "reusable" badge. We have selected candidates for the best paper award, with the award to be announced during the banquet, after the candidates are presented at the conference.

We are excited to welcome three keynotes:

- *Pushing the Limits of Video Game Performance: A Performance Engineering Perspective*, Mathieu Nayrolles (Ubisoft, Canada)
- *Automated Optimisation of Modern Software System Properties*, Federica Sarro (University College London, UK)
- *Application Knowledge Required: Performance Modeling for Fun and Profit*, Georg Hager (Friedrich-Alexander-Universität, Germany)

Additionally, the program will offer 8 workshops, 3 tutorials, 1 data artifact paper, a demo-and-poster track, as well as a data challenge, where students and researchers were asked to address the challenges presented by analyzing a performance dataset of microbenchmark measurements collected from 30 popular Java open source projects, provided by the organizers. During the conference, SPEC member meetings and two European projects meetings will run in parallel to ICPE, enabling interactions between multiple researchers and practitioners communities.

After 3 years of remote conferences, ICPE 2023 will once again be held in person to stimulate the connection and socialization among young and senior researchers and practitioners. The organizing

committee strongly believes that an "in-presence" conference is more effective in providing new insights and concrete opportunities to create strong relationship among ICPE community members.

As always, ICPE 2023 is the result of hard work made by authors, the program committee and the conference organizers. We thank them for their invaluable contribution. Our sincere thanks go to SPEC and ACM, through SIGSOFT and SIGMETRICS, for their continuous support. We are also thankful to ACM SIGSOFT CAPS for providing travel grants to students and professionals, enabling increased participation. Finally, we thank all participants of ICPE 2023, as we rely on you to make this event interactive, engaging, and thought-provoking for everyone involved.

On behalf of the whole organizing committee, we welcome you to Coimbra and hope you will enjoy the conference, the city and Portuguese culture.

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