

HotCloudPerf'23 Workshop Chairs' Welcome

It is our great pleasure to welcome you to the 2023 edition of the *Workshop on Hot Topics in Cloud Computing Performance – HotCloudPerf 2023*.

Cloud computing is emerging as one of the most profound changes in the way we build and use IT. The use of global services in public clouds is increasing, and the lucrative and rapidly growing global cloud market already supports over 1 million IT-related jobs. However, it is currently challenging to make the IT services offered by public and private clouds performant (in an extended sense) and efficient. Emerging architectures, techniques, and real-world systems include interactions with the computing continuum, serverless operation, everything as a service, complex workflows, auto-scaling and -tiering, etc. It is unclear to which extent traditional performance engineering, software engineering, and system design and analysis tools can help with understanding and engineering these emerging technologies. The community needs practical tools and powerful methods to address hot topics in cloud computing performance.

Responding to this need, the HotCloudPerf workshop proposes a meeting venue for academics and practitioners, from experts to trainees, in the field of cloud computing performance. The workshop aims to engage this community and to lead to the development of new methodological aspects for gaining a deeper understanding not only of cloud performance, but also of cloud operation and behavior, through diverse quantitative evaluation tools, including benchmarks, metrics, and workload generators. The workshop focuses on novel cloud properties such as elasticity, performance isolation, dependability, and other non-functional system properties, in addition to classical performance-related metrics such as response time, throughput, scalability, and efficiency.

After a thorough review process, HotCloudPerf 2023 features 5 full papers and 1 short paper. Furthermore, we are proud to include in the workshop two keynote talks, given by the following speakers.

- **Cristian Klein** is a cloud architect at Elastisys and an adjunct lecturer at Umeå University. His role involves looking at data protection regulations and security best practices to make architectural decisions. He gathered over 18 years of experience in operating IT systems. He acted variously as researcher, teacher, consultant and practitioner. His research interests include cloud native technologies, information security and service meshes.
- **Tania Lorido Botran** is a Research Scientist at Roblox. Prior to that, she worked at Microsoft and the Pacific Northwest National Laboratory. During her PhD, she had the opportunity to spend one year at Rice University and also did two internships at VMware and HP Labs. Dr. Lorido Botran received her PhD from the University of Deusto in Spain with a Cum Laude distinction, and her master's degree in Distributed systems from University of the Basque Country with a highest marks distinction. Her current research interests span across ML for systems, data center sustainability and fault-tolerance.

The HotCloudPerf 2023 program committee was composed of the following members: Cristina Abad, ESPOL, Ecuador; Auday Al-Dulaimy, Mälardalen University, Sweden; Ahmed Ali-Edin, Chalmers University of Technology, Sweden; Atakan Aral, University of Vienna, Austria; Marta Beltran, Universidad Rey Juan Carlos, Spain; Andre Bondi, Software Performance and Scalability Consulting, USA; Marc Brooker, Amazon Web Services, USA; Wilhelm Hasselbring, University of Kiel, Germany; Nikolas Herbst, University of Würzburg, Germany; Alexandru Iosup, VU

Amsterdam, The Netherlands; Dragi Kimovski, University of Klagenfurt, Austria; Tania Lorido Botran, Roblox, USA; Satadru Pan, Meta, USA; Riccardo Pincioli, Gran Sasso Science Institute, Italy; Issam Rais, The Arctic University of Norway, Norway; Prateek Sharma, Indiana University Bloomington, USA; Sacheendra Talluri, VU Amsterdam, The Netherlands; Petr Tuma, Charles University, Czech Republic; Andre van Hoorn, University of Hamburg, Germany; Chen Wang, IBM, USA.

Putting together HotCloudPerf 2023 was a team effort. We thank all the authors who submitted their research to the workshop and the keynote speakers. We also thank the members of the HotCloudPerf PC for their in depth reviews and discussion. Furthermore, thanks go to the ICPE workshop chairs Stefano Iannucci and Ana Lucia Varbanescu, the ICPE general chairs Marco Vieira and Valeria Cardellini, and the complete organization team.

The HotCloudPerf workshop is technically sponsored by the Standard Performance Evaluation Corporation (SPEC) Research Group (RG), and is organized annually by the RG Cloud Group. HotCloudPerf has emerged from the series of yearly meetings organized by the RG Cloud Group, since 2013. The RG Cloud Group group is taking a broad approach, relevant for both academia and industry, to cloud benchmarking, quantitative evaluation, and experimental analysis.

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