FOREWORD

Proceedings of ACML 2023


This volume contains 113 papers accepted to the 15th Asian Conference on Machine Learning (ACML 2023) held on November 11-14, 2023. The papers are on a wide variety of contemporary state-of-the-art topics, including computer vision, natural language processing, learning in graphs, trustworthy machine learning, deep learning, optimization, reinforcement learning, unsupervised learning, and Bayesian models, as well as applications to real-world problems.

ACML aims at providing a leading international research forum for researchers in machine learning and related fields to share their original research findings, new ideas and achievements. Continuing with ACML conference trends in recent years, highlighting its worldwide reach, ACML 2023 received submissions from authors in 25+ countries from the Asia-Pacific as well as different parts of the world including Australia, Austria, Belgium, Canada, China & Hong Kong, France, Germany, Greece, India, Iran, Ireland, Israel, Japan, Kazakhstan, Korea, Netherlands, Norway, Philippines, Portugal, Senegal, Singapore, Sweden, Switzerland, Taiwan, Turkey, United Arab Emirates, United Kingdom, United States, Vietnam. As for participants in the conference, about 40% of the participants were from outside of the Asia-Pacific region, namely, Europe, Middle East, Australia and the Americas.

The conference was designed to be in-person, but a small number of pre-recorded presentations were accepted in case of last-minute problems due to visa issues or illnesses. The conference received 333 submissions, comparable to 248 and 378 received in 2022 and 2021 respectively. The standard practice of double-blind reviewing process was followed, and each paper was assigned to one meta-reviewer, and at least 2 reviewers. The Program Committee (PC) had 239 PC members (reviewers) and 48 Senior PC members (meta-reviewers). Papers were allocated based on paper bidding and similarity of subject areas. The Program Committee contributed their valuable time to provide expert reviews, ensuring the high standard of papers selected for the conference. Our sincere gratitude to each of our reviewers and meta-reviewers without whom the conference would not have been possible. Among the 333 submissions, 113 were accepted into the main program, with an acceptance rate of 34%. This year the conference has two formats: long and short orals, in addition to poster presentations for all papers. Of the papers accepted to the conference track, 34 were selected for long oral presentations, while the remaining 79 papers were presented as short orals.

The journal track of ACML 2023 was overseen by the Journal Track Co-Chairs Vu Nguyen and Dani Yogatama. This track received 81 submissions and 28 papers were accepted for publication.
in the Springer Machine Learning Journal, corresponding to an acceptance rate of 35%. The same program committee reviewed both the conference and journal tracks of ACML, and 15 of the journal track papers were selected for the long oral session at the conference.

This year’s program featured four invited talks from leading experts on different topics and from different parts of the world: Kyunghyun Cho (New York University), Le Song (Mohamed bin Zayed University of Artificial Intelligence), Murat Tekalp (Koç University), and Nancy F. Chen (A*STAR).

In addition to the main program, we also had a full day of tutorials and workshops prior to the main conference organized by Tutorial Co-Chairs Öznur Taştan, Hung-Yi Lee, and Vivian Chen, and Workshop Co-Chairs Mustafa Gökçe Baydoğan and Nan Lu. Two tutorials were delivered on contemporary topics: (1) Neural Program Synthesis and Induction, and (2) Trustworthy Learning Under Imperfect Data. In parallel to the tutorials, we had two workshops: (1) New Horizons of Online Learning and (2) Pattern Recognition in Healthcare Analytics (PRHA).

We take the opportunity to thank all speakers and organizers for putting together a strong engaging program for the conference. ACML Steering Committee Co-Chairs, Wee Sun Lee and Hsuan-Tien Lin, together with the Steering Committee, provided invaluable advice for the organization of the conference. The General Co-Chairs, Mehmet Gönen and Ichiro Takeuchi provided oversight over the entire conference, and worked tirelessly to put together all the different pieces of the conference for a very successful conference. The Publication and Publicity Co-Chairs Hande Alemdar and Bo Han handled the preparation of the proceedings and helped in communications related to the conference. Special thanks to the Local Arrangement Co-Chairs Barış Akgün and Arzucaan Ö zgür for handling all the local arrangement issues.

We are also grateful to the generous sponsorship and support of our industry sponsor Softtech and academic sponsor Koç University. We once again thank all speakers, authors, organizers, sponsors, volunteers and attendees for the success of ACML 2023!

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