

Preface

This volume contains the proceedings of the Twenty-second Asian Symposium on Programming Languages and Systems – APLAS 2024, – held during October 22-24, 2024 in Kyoto, Japan.

APLAS brings together programming language researchers, practitioners and implementors *worldwide*, to present and discuss the latest results and exchange ideas in all areas of programming languages and systems. The list of topics includes, among others: programming paradigms and styles; methods and tools to specify and reason about programs and languages; programming language foundations; methods and tools for implementation; concurrency and distribution; applications and case studies.

APLAS is organized by the Asian Association for Foundation of Software (AAFS), founded by Asian researchers in cooperation with many researchers from Europe and the USA. Past APLAS symposiums were held in Taipei ('23), Auckland ('22), Chicago ('21), Fukuoka ('20), Bali ('19), Wellington ('18), Suzhou ('17), Hanoi ('16), Pohang ('15), Singapore ('14), Melbourne ('13), Kyoto ('12), Kenting ('11), Shanghai ('10), Seoul ('09), Bangalore ('08), Singapore ('07), Sydney ('06), Tsukuba ('05), Taipei ('04) and Beijing ('03) after three informal workshops.

The call for papers has attracted 37 submissions, two of which were desk-rejected. The rest were reviewed double-blind: we aimed to keep the identities out of the picture during the whole review process. Each submission has received three reviews. In addition, for some submissions we sought opinions of external experts, whose prompt and very helpful comments were greatly appreciated.

At the end of the review period, the authors had 50 hours to respond to the reviews. PC has considered the responses and decided on acceptance. In many cases the reviews were augmented to account for the responses and to summarize the PC discussion. Quite a number of responses have clarified the submission and resolved the reviewers' concerns. In some other cases, unfortunately, the responses did not address all the concerns and questions raised in the reviews.

No numerical targets were set for acceptance. The only criterion was a submission being understandable, interesting and instructive to the audience and publishable in the proceedings, after perhaps only *minor* revisions. After careful and thorough discussions, the Program Committee has accepted 18 submissions.

The symposium program also included three invited talks, by Albert Cohen (Google), Naoki Kobayashi (University of Tokyo: joint with ATVA 2024) and Sukyoung Ryu (KAIST, South Korea).

Furthermore, APLAS'24 included the student research competition and the associated poster session, as well as APLAS-NIER post-conference workshop (Oct 25, 2024). This year, APLAS was co-located with the 22nd International Symposium on Automated Technology for Verification and Analysis (ATVA).

APLAS 2024 continues the tradition of recognizing the best paper submitted to the symposium. I am delighted to announce that the Best Paper award for APLAS'24 goes to

Benedikt Ahrens, Peter LeFanu Lumsdaine, Paige Randall North

Comparing semantic frameworks of dependently-sorted algebraic theories

Putting together APLAS 2024 has been a team effort. First of all, I would like to thank the authors of the submitted papers and the presenters of the invited talks. Without the Program Committee there would have been no program either, and I am very grateful to the PC members for their hard work. Complementing the PC were External Reviewers, whose contribution is gratefully acknowledged. I am indebted to the General Chair Jacques Garrigue for his advice, encouragement, and support throughout the process. This year APLAS was held in co-operation with ATVA, whose organizing committee – in particular, General Chair Ichiro Hasuo has shared the burden. They have been invaluable in setting up the conference and making sure everything ran smoothly.

We gratefully acknowledge Takashi Suwa for the design of the conference logo, which can be seen on the cover.

Finally, thanks are due to Silver Sponsors *DENSO* and *Mitsubishi Electric*; Organizational Sponsor *The Kyoto University Foundation* and the Award Sponsor *Springer*.

September 2024

Oleg Kiselyov