

34th International Symposium on Algorithms and Computation

ISAAC 2023, December 3-6, 2023, Kyoto, Japan

Edited by

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■ Preface

This volume contains the papers presented at the 34th International Symposium on Algorithms and Computation (ISAAC 2023), which was held in Kyoto, Japan on December 3–6, 2023, organized by Kyoto University, Japan. ISAAC 2023 provided a forum for researchers working in the areas of algorithms, theory of computation, and computational complexity. The technical program of the conference included 55 contributed papers. We received 184 submissions in response to the call for papers. Each submission received at least three reviews. The program committee held electronic meetings using EasyChair. In the end, the program committee selected 55 of the submissions for presentation at the symposium.

The program committee selected the following papers as the recipients of the ISAAC 2023 Best Paper and Best Student Paper Awards.

- **Best Paper.** Carl Feghali, Felicia Lucke, Daniël Paulusma, and Bernard Ries: Matching Cuts in Graphs of High Girth and H -Free Graphs.
- **Best Paper.** Ragesh Jaiswal and Amit Kumar: Clustering What Matters in Constrained Settings: Improved Outlier to Outlier-Free Reductions.
- **Best Student Paper.** Nicola Cotumaccio: Prefix Sorting DFAs: a Recursive Algorithm.

The symposium included two invited presentations, delivered by Edith Elkind (University of Oxford, UK) and Seok-Hee Hong (University of Sydney, Australia). Abstracts of their talks are included in this volume. We are grateful to Inoue Foundation for Science, KDDI Foundation, Support Center for Advanced Telecommunications Technology Research (SCAT), The Telecommunications Advancement Foundation, and Algorithmic Foundations for Social Advancement (AFSA) by Grant-in-Aid for Transformative Research Areas, MEXT, Japan for financial support and to the local organizers of ISAAC 2023. Finally, we acknowledge the endorsement from Technical Committee on Theoretical Foundations of Computing (COMP) of IEICE and Special Interest Group on Algorithms (SIGAL) of IPSJ.

December 2023

Satoru Iwata and Naonori Kakimura



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