

31st International Symposium on Algorithms and Computation

ISAAC 2020, December 14–18, 2020, Hong Kong, China (Virtual
Conference)

Edited by

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ACM Classification 2012

Theory of computation; Mathematics of computing

ISBN 978-3-95977-173-3

Published online and open access by

Schloss Dagstuhl – Leibniz-Zentrum für Informatik GmbH, Dagstuhl Publishing, Saarbrücken/Wadern, Germany. Online available at <https://www.dagstuhl.de/dagpub/978-3-95977-173-3>.

Publication date

December, 2020

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at <https://portal.dnb.de>.

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Digital Object Identifier: 10.4230/LIPIcs.ISAAC.2020.0

ISBN 978-3-95977-173-3

ISSN 1868-8969

<https://www.dagstuhl.de/lipics>

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■ Preface

This volume contains the papers presented at the 31st International Symposium on Algorithms and Computation (ISAAC 2020). ISAAC 2020 was held virtually on December 14–18, 2020 and was organized, together with IPEC 2020, by the Hong Kong Polytechnic University, China. ISAAC 2020 provided a forum for researchers working in the areas of algorithms, theory of computation, and computational complexity.

The technical program of the conference included 63 contributed papers. We received 202 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 64 of the submissions for presentation at the symposium, and two submissions were merged into a joint paper. The program committee selected the following two papers as the co-winners of the ISAAC 2020 Best Paper Awards:

- *Gourds: a sliding-block puzzle with turning*, by Joep Hamersma, Marc Van Kreveld, Yushi Uno, and Tom van der Zanden; and
- *Counting 4-patterns in permutations is equivalent to counting 4-cycles in graphs*, by Bartłomiej Dudek and Pawel Gawrychowski.

The conference included two invited presentations, delivered by Sang-il Oum (Institute for Basic Science and KAIST) and Ke Yi (Hong Kong University of Science and Technology). Abstracts of their talks are included in this volume.

We wish to thank all the authors who submitted extended abstracts for consideration, the program committee members for their scholarly efforts, and all external reviewers who assisted in the evaluation process. Finally, we are grateful to the Hong Kong Polytechnic University for financial support and the local organizers of ISAAC 2020 and IPEC 2020.

December, 2020

Yixin Cao, Siu-Wing Cheng, and Minming Li



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