

# 21st International Symposium on Experimental Algorithms

SEA 2023, July 24–26, 2023, Barcelona, Spain

Edited by

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## ■ Preface

We are pleased to present the collection of papers accepted for presentation at the 21th edition of the International Symposium on Experimental Algorithms (SEA 2023) which was held in Barcelona from 24th July 2023 to 26th July 2023. SEA, previously known as Workshop on Experimental Algorithms (WEA), is an international forum for researchers in the area of the design, analysis, and experimental evaluation and engineering of algorithms, as well as in various aspects of computational optimization and its applications (telecommunications, transport, bioinformatics, cryptography, learning methods, etc.). The symposium aims at attracting papers from both the Computer Science and the Operations Research/Mathematical Programming communities. Submissions to SEA are requested to present significant contributions supported by experimental evaluation, methodological issues in the design and interpretation of experiments, the use of heuristics and meta-heuristics, or application-driven case studies that deepen the understanding of the complexity of a problem. A main goal of SEA is also the creation of a friendly environment that can lead to and ease the establishment or strengthening of scientific collaborations and exchanges among attendees. For this reason, the symposium solicits high-quality original research papers (including significant work-in-progress) on any aspect of experimental algorithms. Each submission that was made to SEA 2023 was reviewed by at least three Program Committee members or external reviewers. After a careful peer review and evaluation process, 21 papers were accepted for presentation and for inclusion in the LIPIcs proceedings, according to the reviewers' recommendations. The acceptance rate was 50%. The scientific program of the symposium also includes presentations by two keynote speakers: Monika Henzinger (Research Group Theory and Applications of Algorithms, Universität Wien) and Pankaj K. Agarwal (Levine Science Research Center, Duke University). Since last year, the conference reintroduced a best paper award. The SEA 2023 best paper award was selected by the Program Committee. Based on the committee's careful assessment, the best paper was selected to be "FREIGHT: Fast Streaming Hypergraph Partitioning" by Kamal Eyubov, Marcelo Fonseca Faraj and Christian Schulz. We congratulate the authors for receiving this award. The 21th edition of SEA was organized by the Universitat Politècnica de Catalunya (UPC). We thank Maria J. Blesa, Amalia Duch, Guillem Rodríguez, and Maria Serna for the organization of the symposium. We also thank the UPC staff, Sito Ibáñez Escudero (ICT and Innovation Support Service), Ana Ibáñez Julià (Administration and Services staff at the UTG ICT Area), and Gabriel Verdejo Álvarez (RDLAB, Computer Science Department) for their support, and the faculty of Universitat Politècnica de Catalunya - BarcelonaTech for providing us with the facilities for the conference. Moreover, we would like to thank the SEA steering committee for giving us the opportunity to host SEA 2023. Special thanks to Ulrich Meyer, chair of the steering committee, for his valuable help. Finally, we express our gratitude to the members of the Program Committee as well as the external reviewers for their support, collaboration, and excellent work.

Barcelona, July 2023  
Loukas Georgiadis







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