

18th International Symposium on Experimental Algorithms

SEA 2020, June 16–18, 2020, Catania, Italy

Edited by

Simone Faro

Domenico Cantone



Editors

Simone Faro 

University of Catania, Italy
faro@dmi.unict.it

Domenico Cantone 

University of Catania, Italy
domenico.cantone@unict.it

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■ Preface

We proudly present the collection of the papers accepted for presentation at the 18th edition of the International Symposium on Experimental Algorithms (SEA 2020), originally planned to be held in Catania (Italy) from June 16 to 18, 2020. Unfortunately, since March 2020, the situation surrounding the COVID19 outbreak has evolved very rapidly also outside of China, endangering the health and safety of everyone, which are our highest priorities. Thus, based on the current health situation in Italy and in the rest of world, the leadership of SEA 2020 has decided that the work of this year symposium will be delivered online to all registered attendees, rather than by the planned physical meeting.

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.

The symposium aims at attracting papers from both the Computer Science and the Operations Research/Mathematical Programming communities. The main theme of the symposium is the role of experimentation and of algorithm engineering techniques in the design and evaluation of algorithms and data structures. 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 to SEA 2020 was reviewed by at least three Program Committee members or external reviewers. After a careful peer review and evaluation process, 24 papers were accepted for presentation and for inclusion in the LIPICs proceedings, according to the reviewers' recommendations. The acceptance rate was 52%.

The 18th edition of SEA was organized by the University of Catania. We thank our university and, more specifically, our Department of Mathematics and Computer Science for their support. We also thank the "Gruppo Nazionale per il Calcolo Scientifico" (GNCS/Indam) for its support in the organization of the event. Thanks are also due to the editors of the *ACM Journal of Experimental Algorithmics* for their interest in hosting a special issue of the best papers presented at SEA 2020. Finally, we express our gratitude to the members of the Program Committee for their support, collaboration, and very good work. Finally, we express our gratitude to the EasyChair platform.

Catania, June 11 2020

Simone Faro and Domenico Cantone



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