

# Preface

This volume contains the papers presented at the 23rd International Computing and Combinatorics Conference (COCOON 2017), held during August 3–5, 2017, in Hong Kong, China. COCOON 2017 provided a forum for researchers working in the areas of algorithms, theory of computation, computational complexity, and combinatorics related to computing.

The technical program of the conference included 48 contributed papers selected by the Program Committee from 111 full submissions received in response to the call for papers. All the papers were peer reviewed by at least three Program Committee members or external reviewers. The papers cover various topics, including algorithms and data structures, complexity theory and computability, algorithmic game theory, computational learning theory, cryptography, computational biology, computational geometry and number theory, graph theory, and parallel and distributed computing. Some of the papers will be selected for publication in special issues of *Algorithmica*, *Theoretical Computer Science* (TCS), and *Journal of Combinatorial Optimization* (JOCO). It is expected that the journal version of the papers will be in a more complete form.

The conference also included three invited presentations, delivered by Dániel Marx (Hungarian Academy of Sciences), Shang-Hua Teng (University of Southern California), and Virginia Vassilevska Williams (Massachusetts Institute of Technology). Abstracts of their talks are included in this volume. Also included are eight contributed talks from a workshop on computational social networks (CSoNet 2017) co-located with COCOON 2017. The papers of CSoNet 2017 were selected by an independent Program Committee, chaired by Donghyun Kim, Miloš Kudělka, and R.N. Uma. We appreciate the work by the CSoNet Program Committee that helped enrich the conference topics.

We wish to thank all the authors who submitted extended abstracts for consideration, the members of the Program Committee for their scholarly efforts, and all external reviewers who assisted the Program Committee in the evaluation process. We thank the Hong Kong Polytechnic University for hosting COCOON 2017. We are also grateful to all members of the Organizing Committee and to their supporting staff.

The conference-management system EasyChair was used to handle the submissions, to conduct the electronic Program Committee meetings, and to assist with the assembly of the proceedings.

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