

29th Annual Symposium on Combinatorial Pattern Matching

CPM 2018, July 2–4, 2018, Qingdao, China

Edited by

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To all algorithmic stringologists in the world

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■ Preface

The Annual Symposium on Combinatorial Pattern Matching is the international research forum in the areas of combinatorial pattern matching, string algorithms and related applications. The objects people work on include trees, regular expressions, graphs, point sets, and sequences. The goal is to design efficient algorithms based on the properties of these structures. The problems dealt with include those in bioinformatics and computational biology, coding and data compression, combinatorics on words, data mining, information retrieval, natural language processing, pattern matching and discovery, string algorithms, string processing in databases, symbolic computation and text searching and indexing.

This volume contains the papers presented at the 29th Annual Symposium on Combinatorial Pattern Matching (CPM-2018) held on July 2-4, 2018 in Qingdao, China. CPM-2018 was run jointly with COCOON-2018. In fact, it is the first time that CPM is held in China.

The conference program included 24 contributed papers and three invited talks, held jointly with COCOON-2018. The three invited talks are by Ming Li (University of Waterloo, Canada), on “Challenges from cancer immunotherapy”; Russell Schwartz (Carnegie-Mellon University, USA), on “Reconstructing tumor evolution and progression in structurally variant cancer cells”; and Michael Segal (Ben-Gurion University of the Negev, Israel), on “Privacy aspects in data querying”.

The contributed papers were selected out of 38 submissions, giving an acceptance ratio of 63%. Each submission was reviewed by at least three Program Committee members (who might have been assisted by external reviewers, all listed below). We thank all the Program Committee members and external reviews for their hard work, on which this excellent scientific program is based.

The Annual Symposium on Combinatorial Pattern Matching started in 1990, and has taken place annually since then. Previous CPM meetings were held in Paris, London (UK), Tucson, Padova, Asilomar, Helsinki, Laguna Beach, Aarhus, Piscataway, Warwick, Montreal, Jerusalem, Fukuoka, Morelia, Istanbul, Jeju Island, Barcelona, London (Canada), Pisa, Lille, New York, Palermo, Helsinki, Bad Herrenalb, Moscow, Ischia, Tel Aviv, and Warsaw. From the 3rd to the 26th meeting, all the proceedings were published in the LNCS (Lecture Notes in Computer Science) series. Since 2016, CPM proceedings have been published in the LIPIcs (Leibniz International Proceedings in Informatics) series, as volume 54 (CPM-2016) and volume 78 (CPM-2017) respectively.

The submission and review process was carried out with EasyChair. We thank the CPM Steering Committee for all the advice and support. We thank Haitao Jiang and Daming Zhu (and their students) at Shandong University for their extensive involvement and local arrangements. Finally we would like to thank the National Natural Science Foundation of China for providing generous financial support to the conference.

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