Preface

The Sixteenth International Symposium on Combinatorial Search (SoCS) was held at the Aquapalace Hotel Prague, Czech Republic, at July 14–16, 2023, just after the International Conference on Automated Planning and Scheduling (ICAPS). The symposium co-chairs were Roman Barták, Wheeler Ruml, and Oren Salzman.

Heuristic search and other forms of combinatorial search optimization are very active areas of research in artificial intelligence, robotics, planning, and other areas of computer science. The International Symposium on Combinatorial Search (SoCS) is meant to bring researchers in such areas together to exchange ideas and cross-fertilize the field. SoCS is a forum for researchers and submissions in all fields that use combinatorial search, including artificial intelligence, planning, robotics, constraint programming, metareasoning, operations research, navigation, and bioinformatics. The symposium also welcomes submissions presenting real-world applications of heuristic search.

For the 2023 edition, we received 38 long paper submissions and 12 short paper submissions (50 total). For the final program, 16 long papers (42%) and 6 short papers (50%) were accepted (44% in aggregate). We also accepted 10 extended abstracts for presentation as posters. We would like to extend our sincere thanks to all of the members of the Program Committee for their excellent work in thoroughly reviewing and discussing the submissions. 20 students participated in our Doctoral Consortium program.

The program also featured two invited talks, by Jorge Baier (Pontificia Universidad Católica de Chile) and Scott Kiesel (Amazon Robotics), four master classes, by Álvaro Torralba (Aalborg University), Sabine Storandt (Universität Konstanz), Levi Lelis (University of Alberta), and Maxim Likhachev (Carnegie Mellon University), and a Doctoral Consortium talk, by Ariel Felner (Ben-Gurion University of the Negev).

Finally, we thank our sponsors: the United States National Science Foundation, the Artificial Intelligence Journal, Filuta AI, RSJ, and Czech Society for Cybernetics and Informatics.

Roman Barták, Wheeler Ruml, and Oren Salzman SoCS 2023 Conference Chairs

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