

Preface

Welcome to the Fifth International Symposium on Combinatorial Search (SoCS 2012)! These proceedings are the result of hard work by many, from researchers to reviewers and the publisher. The reviewing process was rigorous. Every submitted paper was assigned to three anonymous reviewers; all experts in the topic of the paper. Decisions were carefully made based on the reviews and on further discussions by the conference chairs and the reviewers. The conference chairs submitted some papers to the conference, but only if the research was primarily conducted by students. These submissions were independently handled outside the main reviewing processes by Rong Zhou, who recruited anonymous reviewers and managed all these reviews. This year, the SoCS venue was at the Niagara Falls (Canada).

A total of 55 papers were submitted to SoCS-2012 and were assigned to 38 PC members (that recruited 11 extra reviewers). Most papers were of high quality. Of these, 18 papers were accepted for oral talks, 12 papers for poster presentations (one out of which was accepted as a position paper). In addition, as one of the purposes of SoCS is to cross-fertilize the field of combinatorial search, 9 posters were selected based on related papers that had been accepted to other venues. Additionally, the Grid-based Path Planning Competition (GPPC) was held before the competition and 7 papers describing the competing approaches were presented as posters. We selected two papers as the best paper and the best student paper, the first of them having the opportunity to present their work orally at AAAI-12.

Besides these talks and presentations, we had the privilege of having two invited talks from internationally recognized experts. Tristan Cazenave from Université Paris-Dauphine gave a talk on single-agent Monte-Carlo tree search. The second invited talk was given by Stefan Edelkamp from Universität Bremen with the title Heuristic or Blind Search?

Many people and institutions made SoCS-2012 possible and they all deserve our deepest thanks. First, we heartily thank the generous support from

the *Artificial Intelligence Journal* (AIJ), and the United States National Science Foundation (NSF). This support enabled the establishment of archival proceedings, helped subsidize the invited speakers, and provided scholarships that helped many students to attend SoCS this year. Besides, the *AI Communications* journal offered the possibility for a second year in a row to have a fast-tracked publication with a selection of papers accepted at SoCS'12.

Behind the scenes, there were many individuals who helped make SoCS 2012 successful and we wish to thank them all. Thanks to the staff at the Association for the Advancement of Artificial Intelligence and the AAAI Press who generated the proceedings. Special thanks to Rong Zhou for his help with handling reviews.

We were very happy with the opportunity we had in organizing this event and look forward to many more successful gatherings.

— *Daniel Borrajo, Ariel Felner, Richard Korf,
Maxim Likhachev, Carlos Linares López,
Wheeler Ruml, and Nathan Sturtevant*
Symposium Chairs