Editorial, SEA 2014 Special Issue

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This special issue contains the seven best papers presented in their preliminary form at the 13th International Symposium on Experimental Algorithms (SEA 2014), which was held in Copenhagen between the 29th of June and the 1st of July, 2014. The symposium was co-located with the 14th Scandinavian Symposium and Workshops on Algorithm Theory (SWAT 2014) and the 41st International Colloquium on Automata, Languages, and Programming (ICALP 2014).

The first Symposium on Experimental Algorithms (SEA) was held in Riga in 2001, then under the name Workshop on Experimental Algorithms (WEA); it got its current name in 2009. Since 2003 the symposium has been held annually. The SEA is a forum for researchers in the area of design, analysis, and experimental evaluation and engineering of algorithms, as well as in various aspects of computational optimization and its applications. Typical topics covered by this symposium include: algorithm engineering, algorithmic libraries, approximation techniques, combinatorial structures and graphs, computational optimization, data structures, distributed and parallel algorithms, experimental techniques and statistics, information retrieval, and experimental aspects of implementation, testing, evaluation and fine-tuning algorithms.

The program of SEA 2014 included three invited talks and 36 regular presentations that were chosen from 81 submissions. The contributions covered a wide range of topics in experimental algorithmics, which is still reflected by the papers selected for this special issue; the topics of the selected papers range from branch-and-bound algorithms for NP-hard problems to extremely fast data structures for large text collections. The papers were invited based on their evaluation by the program committee, substantially revised (at least 30% new content), and went through the standard rigorous refereeing process of the ACM Journal of Experimental Algorithmics (ACM JEA) before being accepted to this special issue.

We wish to thank the authors for submitting their papers to the ACM JEA, the referees for their expert reviews that improved the quality of the submissions, and the journal for giving us the opportunity to compile this special issue. We hope that the readers will find the papers included both interesting and enjoyable.

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