

Special Issue on
Algorithm Selection and Configuration in Evolutionary Computation
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Guest Editors:

Holger H. Hoos, Universiteit Leiden, The Netherlands, hh@liacs.nl

Heike Trautmann, University of Münster, Germany, trautmann@wi.uni-muenster.de

Associate Editor:

Frank Neumann, The University of Adelaide, Australia, frank.neumann@adelaide.edu.au

Description:

The development of effective automated algorithm selection and configuration techniques has been one of the major success stories in the area of empirical algorithmics in recent years. The goal of this special issue is to provide an account of recent advances in research on algorithm selection and configuration, with a focus on evolutionary computation and related meta-heuristic techniques. It provides an interdisciplinary platform for researchers from evolutionary computation, other areas of artificial intelligence, theoretical computer science and machine learning. The special issue will present in a coherent form novel results from the area of algorithm selection and configuration, related to evolutionary computation and related meta-heuristic techniques (such as ant colony optimisation, estimation of distribution algorithms, particle swarm optimisation, artificial immune systems and other stochastic local search techniques). Authors are encouraged to submit novel, high-quality research from any sub-area, including, but not limited to,

- automated algorithm selection
- specific machine learning concepts
- configuration methods
- performance analysis
- features and diversity of problem instances
- benchmarking concepts
- exploratory landscape analysis

Results and methods which establish new connections between the sub-areas of evolutionary computation, artificial intelligence, operations research and/or theoretical computer science are highly welcome. Methods from related areas being used in a novel way for evolutionary computation are of particular interest to the interdisciplinary nature of this special issue. Authors are invited to submit original work on topics relevant to this special issue.

Submission:

Authors should submit their manuscripts to the Evolutionary Computation Editorial Manager at <http://ecj.napier.ac.uk>. When submitting a paper, please send at the same time also an email to Frank Neumann (frank.neumann@adelaide.edu.au) and a copy to ecj@napier.ac.uk mentioning the special issue, the paper id, title, and author list to inform us about the submission.