

Scope

All research in algorithmic work in bioinformatics, computational biology and systems biology. The emphasis is mainly on discrete algorithms and machine-learning methods that address important problems in molecular biology, that are founded on sound models, that are computationally efficient, and that have been implemented and tested in simulations and on real datasets. The goal is to present recent research results, including significant work-in-progress, and to identify and explore directions of future research.

Topics

Original research papers (including significant work-in-progress) or state-of-the-art surveys are solicited in all aspects of algorithms in bioinformatics, computational biology and systems biology - including, but not limited to:

- Exact and approximate algorithms for sequence analysis, gene and signal recognition, alignment and assembly, molecular evolution, structure determination or prediction, gene expression, molecular pathways and networks, proteomics, functional and comparative genomics, and drug design.
- Methods, software, and data repositories for development and testing of such algorithms and their underlying models, as well as high-performance computing approaches to hard learning and optimization problems.
- Novel approaches to analyzing and modeling next-generation sequence data, including sequence assembly, population genomics, metagenomics, metatranscriptomics and small RNA sequencing.

Important Dates

Submission deadline: May 2, 2016 Author notification: May 30, 2016 Final version due: June 13, 2016 Workshop: August 22-24, 2016

Keynote Speaker

Kiyoshi Asai, University of Tokyo, Japan.

Details on submitting manuscripts

See http://conferences.au.dk/algo16/wabi under 'Paper Submission' for details.

Proceedings

Proceedings will be published in the Springer series Lecture Notes in Bioinformatics, where accepted papers will be allotted 12 pages. Selected papers will also be invited for an extended publication in a thematic series in Algorithms for Molecular Biology (AMB).

Program Committee

Martin Frith (co-chair), National Institute of Advanced Industrial Science and Technology (AIST), Japan. Christian N. S. Pedersen (co-chair), Aarhus University, Denmark.

See http://conferences.au.dk/algo16/wabi for a list of all program committee members.