

FAST AND EFFICIENT SOLUTIONS FOR COMPUTATIONAL INTELLIGENCE METHODS IN BIOINFORMATICS, SYSTEMS AND COMPUTATIONAL BIOLOGY

Aims and Scopes

The aim of this special session is to bring together researchers involved in the definition, enhancement and application of computational intelligence and machine learning techniques accelerated by means of fast and efficient implementations. In particular, this session will focus on the challenges in the implementation of computational intelligence methods that exploit data parallelism, model parallelism, large-scale parameter searches, high performance computing solutions, etc.

Topics of interest include, but are not limited to:

- Applications of machine learning exploiting HPC solutions
- Machine learning models, including deep learning, for large scale systems
- Enhancing the applicability of machine learning techniques in HPC
- Learning of large scale models
- Optimization methodologies for large scale models
- Training machine learning models on large datasets
- Tackling the problems of large datasets (e.g. noisy labels, missing data)
- Large scale machine learning applications
- Machine learning for Image analysis
- HPC solutions for Bioinformatics and Systems Biology
- Evolutionary techniques

Session chairs

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