Machine Learning Algorithms for Bioinformatics Problems

Guest Editor:

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Message from the Guest Editor

The Special Issue will focus on algorithms in the following areas:

- Statistical (genetic, phylogenetic, epigenomic, transcriptomic, proteomic and epidemiologic) sequence analysis;
- The prediction of complex biochemical structures, molecular functions and disease outcomes;
- The modeling and simulation of organic matter, compartments of organisms or of complete living systems and their populations;
- The recognition, understanding and prediction of the behavior of living systems using machines (including human–machine interaction);
- Physical and biological intelligence (intelligent solutions to the above problems, found in nature and not invented by humans).

We are also looking for contributions that have high educational value to:

- Scientists working on machine learning to understand the specific settings of biology;
- Scientists working on bioinformatics to understand the wealth of existing expertise in the machine learning community.

High-quality papers that address both theoretical and practical topics are solicited. Submissions regarding traditional bioinformatics domains and new applications are welcome.

Special Issue

Editor-in-Chief

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Message from the Editor-in-Chief

Algorithms are the very core of Computer Science. The whole area has been considered from quite different perspectives, having led to the development of many sub-communities: Complexity theory (limitations), approximation or parameterized algorithms (types of problems), geometric algorithms (subject area), metaheuristics, algorithm engineering, medical imaging (applications), indicates the range of perspectives. Our journal welcomes submissions written from any of these perspectives, so that it may become a forum for exchange of ideas between the corresponding scientific subcommunities.

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