

# Application of Machine Learning Methods in Bio-medical Informatics

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## Call for Papers Announcement

With increasing the number of diseases, it is of vital significance to develop exact, prompt, and reliable methods to diagnose these diseases and predict their performance to cure them. Today, with the development of computer science and engineering, machine learning methods have emerged as a new way to model sophisticated problems in many industries and medicines. Attractive mathematical properties such as saving the time of calculations, considerable adaptivity, uniform analysis capability, high ability for noise controlling, and great computational rate are the prime causes of the rapid spreading of smart models. Machine learning methods enable remarkable advances in the fields of drug discovery, healthcare, genome research, computational biology, etc. By applying machine learning, scientists, doctors and physicians can develop new exciting personal therapeutic strategies for living longer and having healthier lifestyles that were unfeasible not that long ago.

This special issue aims to present the state of the art machine learning methods that address the bio-medical challenges. In fact, this special issue seeks the latest fundamental advances in the state of the computational biology and data mining in biological complex data, biomarker discovery and practice of pattern mining algorithms, intelligent models, and related areas. We are interested not only in papers with strong algorithmic and modelling innovations, but also in works that have biological models, application-oriented experimental implementations and evaluations.

The results of this special issue is applicable for medical institutions, medicine developing incorporations, and overall in curing diseases.

Topics that will be considered for this special issue include, but are not limited to, the following:

- Evolutionary Algorithm in Bio-medical
- Computational Biomarker Discovery in Proteomics
- Clinical Bioinformatics and Translational Medicine
- Apply Pattern Mining Algorithms on Biological Problems
- Mathematical Modelling in Neurocomputing
- BigData in Neurocomputing
- Outlier Detection in Bio-medical Data
- Biomarkers in Clinical Drug Development
- Methodologies for Genome-Wide Association Studies
- High-Throughput Technologies in Neurocomputing
- Supercomputing to Identify Biomarkers
- Mathematical Methods for Diagnostic Classifiers
- Clustering of Bio-medical
- Intelligent Models in Bio-Medical
- Biological Network Analysis
- Network-Based and Pathway-Aware Biomarker Strategies

Authors are not restricted to these topics but submissions must provide relevant computational biology and/or data mining other related topic within the remit this special issue.

### **Paper Submission**

Full text submission due date: January 15, 2019.

Full paper should be submitted online to the journal at

<http://oeeps.aimspress.com/mbe/ch/author/login.aspx>

Before submission, authors should carefully read over the instruction for Authors which are located at <http://www.aimspress.com/news/295.html>