

**The 14th IEEE International Conference on Machine Learning and Applications
(IEEE ICMLA'15), Miami - Florida, USA**

9-11 December 2015

**Special Session on
Machine Learning (ML) Techniques in Bioinformatics**

Special Session Organizer

Dr. Evgin Goceri

The Ohio State University, USA

Special Session Co-Organizer

Dr. Melih Gunay

Akdeniz University, Turkey

AIMS AND SCOPE

ML techniques are increasingly being used to address problems in bioinformatics and computational biology. ML based methods (e.g., support vector machines, neural networks, markov models, graphical models) have been successful in analyzing life science data due to their capabilities in handling randomness and uncertainty of data noise and in generalization. Therefore, ML based techniques have been widely applied to discover and mine the knowledge in the databases and has indeed gained a lot of success in this research area. Several learning algorithms are available in the present literature. Therefore, researchers are facing difficulties in choosing the best technique that can be applied to their datasets. ML in Bioinformatics is an indispensable resource for biologists, computer scientists, mathematicians, engineers, researchers, physicians, clinicians, and medical informaticists.

The goal of this session is to bring together professionals, researchers, and practitioners in the area of bioinformatics to present, discuss, and share the latest findings in the field, and exchange ideas that address real-world problems with real-world solutions.

The special session opens to everybody as well as industrial partners to make contribution in this area. Topics for this session include, but are not limited to:

- ❖ Biomedical image analysis/processing
- ❖ Computer aided diagnosis/treatment of diseases
- ❖ Treatment outcome modeling/analysis
- ❖ Detection of cancer lesions in diagnostic images
- ❖ Analysis of high through-put biotechnology data
- ❖ Analysis and prediction of anatomical motion
- ❖ Healthcare applications of mobile and pervasive technologies
- ❖ Mobile solutions for sharing information in healthcare services
- ❖ Modeling, simulation, and evaluation of healthcare services
- ❖ Evaluation and use of information technology in healthcare

- ❖ Industrial challenges in bioinformatics
- ❖ Future directions and challenges in bioinformatics

Papers should be submitted for this special session at the regular paper submission website (<http://www.icmla-conference.org/icmla15/>). Papers should not exceed a maximum of 6 pages (including abstract, body, tables, figures, and references), and should be submitted as a pdf in 2-column IEEE format. Detailed instructions for submitting the papers are provided on the conference at home page.

Program Committee Members:

Umit Deniz Ulusar	Akdeniz University, Turkey
Esther Martinez Dura	University of Valencia, Spain
Fadi Al-Turjman	Queen's University, Canada
Numan Goceri	Siemens Healthcare, Germany

Important Dates:

Paper Submission Deadline	August 30th, 2015
Notification of Acceptance	September 30th, 2015
Camera-Read Papers	October 15th, 2015

If you have any question about this session, please do not hesitate to ask your question to evgin@akdeniz.edu.tr