

**The 17th IEEE International Conference on Machine Learning and Applications
(ICMLA-2018)**

**Special Session: Machine Learning for Complex Data Mining Applications
December 17-20, 2018, Orlando, Florida, USA**

www.icmla-conference.org/icmla18

Aim

With the increasing growth of complex data generated from biological, chemical, health, social network, industrial, environmental, and mobile domains, there is a need for developing new machine learning methods to analyze such complex data. Examples of these complex data mining applications include drug sensitivity prediction, predicting biological activities of chemical compounds, monitoring patients using electronic health records, sentiment analysis to improve sales, monitoring energy consumptions for sustainable environments, and monitoring users' activities using mobile data. The success behind complex data analysis relies on the employment of new machine learning methods.

Scope

This special session aims to gather not only machine learning researchers, but also researchers interested in complex data mining applications. Original papers related to the following topics, as well as other papers related to employing novel machine learning paradigms are welcome:

- Online and Active Learning
- Deep Learning
- Privacy Preserving Learning
- Reinforcement Learning
- Representation Learning
- Large-Scale Machine Learning
- Multitask and Transfer Learning
- Zero-Shot Learning
- Preference Learning and Ranking
- Similarity and Distance Learning
- Supervised, Unsupervised, and Semi-Supervised Learning
- Boosting and Ensemble Methods
- Dimensionality Reduction Methods

Submission Guidelines and Instructions

Papers submitted for reviewing should conform to IEEE specifications. Manuscript templates can be downloaded from [IEEE website](#). The maximum length of papers is 8 pages. All the papers will go through double-blind peer review process. Authors' names and affiliations should not appear in the submitted paper. Authors' prior work should be cited in the third person. Authors should also avoid revealing their identities and/or institutions in the text, figures, links, etc.

Papers must be submitted via the [CTM System](#) by selecting the track “Special Session on Machine Learning for Complex Data Mining Applications”. All accepted papers must be presented by one of the authors, who must register. Detailed instructions for submitting papers can be found at [How to Submit](#) .

Paper Publication:

Accepted papers will be published in the ICMLA 2018 conference proceedings (published by IEEE). A selected number of accepted papers will be invited for possible inclusion, in an expanded and revised form, in some journal special issues.

Important Dates:

Submission Deadline: September 7, 2018

Notification of Acceptance: October 7, 2018

Camera-ready papers & Pre-Registration: October 17, 2018

Special Session Organizers

-Turki Turki, Assistant Professor, Department of Computer Science, King Abdulaziz University, Jeddah, Saudi Arabia. Email: tturki@kau.edu.sa

-Jason T. L. Wang, Professor, Department of Computer Science, New Jersey Institute of technology, Newark, NJ, USA. Email: wangj@njit.edu

-Zhi Wei, Associate Professor, Department of Computer Science, New Jersey Institute of Technology, Newark, NJ, USA. Email: zhiwei@njit.edu

Program Committee:

Turki Turki, King Abdulaziz University, Saudi Arabia

Jason T. L. Wang, New Jersey Institute of Technology, USA

Zhi Wei, New Jersey Institute of Technology, USA

Y-h. Taguchi, Chuo University, Japan

Tanmoy Chakraborty, Indraprastha Institute of Information Technology Delhi, India

Jie Zhang, Adobe Systems Inc., USA

Yasser EL-Manzalawy, Pennsylvania State University, USA

Rajendra Prasath, Indian Institute of Technology, Kharagpur, India