

2017 IEEE International Conference on Innovations in Intelligent SysTems and Applications

3-5 July 2017, Gdynia, Poland



# MLMAT 2017 Special Session on Machine Learning : Methodologies, Applications

## and Trends

at the 2017 IEEE International Conference on INnovations in Intelligent SysTems and Applications (INISTA 2017) Gdynia, Poland, July 3-5, 2017 Conference website: http://inista.org/

## **Special Session Organizers**

### Prof. Chung-Ming Ou

Department of Information Management Kainan University, Taiwan E-mail: cou077@mail.knu.edu.tw

#### **Prof. Chung-Ren Ou** Department of Energy and Materials Technology Hsiuping University of Science and Technology, Taiwan E-mail: **crou@mail.hust.edu.tw**

# **Objectives and topics**

Artificial Intelligence (AI) has been applied successfully to many fields such as data analysis, finance, multimedia, signal and image processing, web technologies, robotics, and automations, etc. Machine learning, as a major technology behind AI, is changing the world rapidly by deploying varied algorithms. For example, artificial neural networks, especially those for deep learning, are implemented in real world such as the GPU computations owing to the maturity of high-speed and parallel architecture. The latter is also becoming a promising research field for further explorations. Many researches of machine learning are inspired by the developments of computational intelligence. How machine learning can be contributed to varied applications related to intelligence is the main focus of this special session. The methodologies of machine learning may include mathematical or statistical foundations, algorithms, architectures, and uncertainty issues. As for applications of machine learning, we look forward to including researches or implementations in varied fields which are emerged to intelligence and automation. For future trends of machine learning, we encourage authors to propose their innovative ideas and concepts. We offer an opportunity for researchers and practitioners to identify new promising research directions as well as to publish recent advances in this area. The scope of the MLMAT 2017 includes, but is not limited to the following topics:

- Algorithms of machine learning
- Mathematical foundations of machine learning
- Machine learning based on probability and statistics
- Classifications based on machine learning
- Supervised learning and non-supervised learning
- Machine learning based on rough sets or fuzzy set theory
- Methodologies of computational intelligence
- GPU-based parallel computation and deep learning implementations
- Big data and machine learning
- IoT and machine learning
- Decision making by machine learnings
- FinTech and machine learning
- Intelligent systems with machine learning

- Machine learning in medicines, medical diagnosis and health care
- Uncertainty based on machine learning
- Impact of machine learning to AI

## **Important dates**

Submission of papers: 1 March 2017 Notification of acceptance: 15 April 2017 Camera-ready papers: 30 April 2017 Registration & payment: 15 May 2017 Conference date: 3-5 July 2017

# **Program Committee (to be invited)**

## **Submission**

All contributions should be original and not published elsewhere or intended to be published during the review period. Authors are invited to submit their papers electronically in pdf format, through EasyChair. All the special sessions are centralized as tracks in the same conference management system as the regular papers. Therefore, to submit a paper please activate the following link and select the track: *MLMAT 2017: Special Session on Machine Learning: Methodologies, Applications and Trends:* https://easychair.org/conferences/?conf=inista2017

Paper format: Papers must be prepared using IEEE templates for conference proceedings.

**Page limit:** The maximum page limit is 6 inclusive of figures and tables. INISTA will offer the option to buy limited number of extra pages for submission.

Language: The official language for the conference is English. Less than satisfactory English usage may form the sole basis for rejection of a paper and omission of any such final paper version from the conference proceedings. Authors whose native language is not English are encouraged to check their papers for proper English spelling and grammar using tools such as English grammar checkers available with most word processing application software. Alternatively, proofreading support from a native English-speaking colleague or technical editor may suffice. Some authors may be interested in the paid service available at the following link: http://www.prof-editing.com/ieee/ for the final version of the paper