# The 21<sup>th</sup> IEEE International Conference on Machine Learning and Applications (IEEE ICMLA-2022)

# Special Session on: Machine Learning for Predictive Models in Engineering Applications (MLPMEA 2022)

December 12-15, 2022, The Bahamas, Caribbean

https://www.icmla-conference.org/icmla22/

## **Background and Aims**

The MLPMEA 2022 special session provides an international forum for sharing knowledge and results on the theory, methodology, and applications of Machine Learning for developing predictive models for different engineering applications. Various Machine Learning methods can efficiently handle complex prediction problems and have abilities to handle large-scale datasets with uniform characteristics and noisy data. This MLPMEA 2022 special session covers topics related to building predictive models using different Machine Learning methods to solve specific problems that arise in the engineering domain. The MLPMEA encourages researchers to publicly share their data, to promote interdisciplinary research between the machine learning and engineering communities and conduct verifiable, repeatable experiments that practitioners can use.

# Scope/Topics

Topics relevant to this session include, but are not limited to:

- Predictive modeling applications and pressing challenges/opportunities in engineering.
- Using predictive modeling for accelerating materials design.
- Developing predictive modeling tools that can assist engineers in defining, exploring, and evaluating alternative systems or designs.
- Using predictive modeling in additive manufacturing.
- Applications of artificial neural networks and other machine learning methods to solve engineering problems.

#### **Submission Guidelines and Instructions**

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

### **Paper Publication:**

Accepted papers will be published in the ICMLA 2022 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 9, 2022

• Notification of Acceptance: October 7, 2022

www.ieee.org/conferences\_events/conferences/publishing/templates.html

• Camera-ready papers & Pre-Registration: October 14, 2022

## **Special Session Organizers/Chairs**

Ali Bou Nassif, Department of Computer Engineering, University of Sharjah, UAE *Email:* anassif<at>sharjah.ac.ae

Mohammad Azzeh, Department of Data Science, Princess Sumaya University for Technology, Jordan *Email:* m.azzeh<at>psut.edu.jo

Shadi Banitaan, Department of Electrical and Computer Engineering and Computer Science, University of Detroit Mercy, USA *Email:* banitash<at>udmercy.edu

Special Session contact e-mail: anassif<at>sharjah.ac.ae

## **Program Committee (tentative):**

Abdallah Moubayed, IBM, USA

Ahmet Samet, INSA, USA

Akbar Siami Namin, Texas Tech University, USA

Ali Bou Nassif, University of Sharjah, UAE

Celso Lopes Junior, Universidade de Pernambuco, Brazil

Cherif Salama, The American University in Cairo, Egypt

Cuauhtemoc Lopez-Martin, Universidad De Guadalajara, Mexico

Ghaith Alrefai, Oakland University, USA

Hui Li, Nankai University, China

Kamran Kowsari, University of Virginia, USA

KatarinaGrolinger, The University of Western Ontario, Canada

Lukasz Radlinski, West Pomeranian University of Technology Szczecin, Poland

Mahmoud Elmezain, Tanta University, Egypt

Man Leung Wong, Lingnan University, China

Mina Maleki, University of Detroit Mercy, USA

Ming Zhang, Utah State University, USA

Miriam Faied, University of Detroit Mercy, USA

Mohammad Azzeh, Applied Science University, Jordan

MohammadNoor Injadat, University of Western Ontario, Canada

Nandakumar Selvaraj, Biofourmis, USA

Raed Seetan, Slippery Rock University, USA

Shadi Banitaan, University of Detroit Mercy, USA

Sotiris Kotsiantis, University of Patras, Greece

Teng-Sheng Moh, San Jose State University, USA