



an Open Access Journal by MDPI

# Emerging Applications of Machine Learning in Smart Systems Symmetry

Guest Editors:

### Dr. Farnaz Farid

Cyber Security and Behaviour, School of Social Sciences, Western Sydney University, Sydney, Australia

#### Dr. Farhad Ahamed

School of Computer, Data and Mathematical Sciences, Western Sydney University, Kingswood, NSW 2747, Australia

#### Dr. Mahmoud Elkhodr

School of Engineering and Technology, Central Queensland University, Sydney, NSW 2000, Australia

Deadline for manuscript submissions: closed (30 June 2024)

### Message from the Guest Editors

Dear Colleagues,

In the wave of the third Artificial Intelligence (AI) revolution, smart systems have become a norm in our day to day life. Machine learning, a subset of AI, is one of the most influential enablers behind these smart systems. On the other hand, the symmetry concept in machine learning models is gaining momentum. Machine learning is bringing both positive and negative emotions and concerns to the research community. Consequently, human-centred Artificial Intelligence is in the spotlight. The ethical concern related by machine learning is of paramount importance in smart healthcare, autonomous, and other intelligent systems. Machine learning has also become a critical technology to enable contemporary cybersecurity systems.

This Special Issue of *Symmetry* features emerging smart systems, along with state-of-the-art machine learning and applied symmetrical methods in developing models and their applications. We are seeking contributions around this theme. The researchers are encouraged to submit their original works that cover some novel aspects of machine learning in the context of smart systems.



mdpi.com/si/103669







an Open Access Journal by MDPI

# **Editor-in-Chief**

#### Prof. Dr. Sergei Odintsov

1. ICREA, 08010 Barcelona, Spain 2. Institute of Space Sciences (IEEC-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

### Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

# **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within SCIE (Web of Science), Scopus, CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

**Journal Rank:** JCR - Q2 (Multidisciplinary Sciences) / CiteScore - Q1 (General Mathematics )

# **Contact Us**

*Symmetry* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/symmetry symmetry@mdpi.com X@Symmetry\_MDPI