Special Issue

AI and Machine Learning Applications in Industrial Automation

Message from the Guest Editors

This Special Issue aims at analyzing relevant industrial demands for AI and machine learning applications. The chosen focus is providing the state of the art and trends and understanding the main research challenges in AI and machine learning tools applied to industrial automation systems. The topics include but are not limited to industrial applications of deep learning and artificial neural networks, expert systems, fuzzy and neuro-fuzzy systems, genetic algorithms, multi-agent systems, bio-inspired algorithms, and hybrid approaches. Application examples to industrial processes include intelligent manufacturing systems, intelligent control systems, intelligent machines and robots, AI in cybersecurity, AI for predictive maintenance, smart sensors and sensing technology, AI-based condition monitoring, IoT-enabled smart systems, and intelligent signal processing and data analyses. Keywords:

- industrial automation
- artificial intelligence
- machine learning
- adaptive production systems
- bio-inspired algorithms

Guest Editors

Prof. Dr. Pedro Oliveira Conceição Junior

Department of Electrical Engineering, Graduate Program in Electrical Engineering, São Paulo State University, UNESP, Bauru, SP 17033-360, Brazil

Prof. Dr. Doriana Marilena D'Addona

Department of Chemical, Materials and Industrial Production Engineering, Piazzale Tecchio 80, 80125 Naples, Italy

Deadline for manuscript submissions

closed (10 March 2022)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/95909

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

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

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)