



Machine Learning in Model Predictive Control and Optimal Control

Guest Editors:

Dr. Zhe Wu

Dr. Xunyuan Yin

Dr. Yan Qin

Prof. Dr. Xiaodong Xu

Message from the Guest Editors

This Special Issue intends to provide a platform for researchers and practitioners to share state-of-the-art algorithms and methods for both theory and application works to address some of the aforementioned fundamental challenges associated with using machine learning in MPC and optimal control.

Potential topics include, but are not limited to:

Deadline for manuscript
submissions:

closed (20 November 2023)

- Novel ML methods for model development and theoretical analysis on the generalization performance of ML models;
- Theoretical methodologies and applications of predictive control and optimal control using machine learning techniques;
- ML in parameter and state estimation, fault detection, soft sensing, and their applications in MPC and optimal control;
- Computational development of ML-based MPC and optimal control systems to address practical challenges such as computational efficiency, feasibility for large-scale systems, etc.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giancarlo Cravotto

Department of Drug Science and
Technology, University of Turin,
Via P. Giuria 9, 10125 Turin, Italy

Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

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, AGRIS, and other databases.

Journal Rank: CiteScore - Q2 (Chemical Engineering (miscellaneous))

Contact Us

Processes Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/processes
processes@mdpi.com
[X@Processes_MDPI](https://twitter.com/Processes_MDPI)