



Advances and Applications of Numerical Analysis and Intelligent Computing

Guest Editor:

Dr. Francesca Pelosi

Department of Information
Engineering and Mathematical
Sciences, University of Siena,
53100 Siena, Italy

Deadline for manuscript
submissions:

20 June 2024

Message from the Guest Editor

The use of intelligent computing has revolutionized several areas, including the numerical analysis of partial differential equations (PDEs), inverse problems and compressed detection. On the other hand, numerical analysis forms the basis of many machine learning algorithms. The use of existing methods and the adjustment of their parameters still gives very interesting results for the problems dealt with. Aiming to go further in solving existing or new, increasingly difficult problems, scientists must study, analyze and process the numerical analysis used in machine learning in order to research and create new, stable and accurate methods.

In this Special Issue, we invite our colleagues to submit articles that use numerical analysis methods to address problems in the field of intelligent computing, presenting both theoretical and experimental results. Areas of interest arise from inverse problems, imaging, optimal control, approximation theory and applied harmonic analysis. Possible topics range from network architectures; neural operators for PDEs; deep generative models and real-world applications, from machine learning to the biomedical, engineering and physical sciences.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

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.

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), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

Contact Us

Applied Sciences Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/applsci
applsci@mdpi.com
X@Applsci