Special Issue

Advances and Applications of Numerical Analysis and Intelligent Computing

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.

Guest Editor

Dr. Francesca Pelosi
Department of Information Engineering and Mathematical Sciences, University of Siena, 53100 Siena, Italy

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

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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

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