Special Issue

Applications of Mathematical Modeling and Neural Networks

Message from the Guest Editors

The current Special Issue is devoted to the applications of mathematical modeling and neural networks. Neural networks have been at the heart of machine learning, since its inception, being one of the most popular techniques, utilized by many supervised learning algorithms. Both approaches have been proven very effective in correctly predicting system behavior and, despite their limitations, are at the forefront of numerical and computational mathematics. Especially today, with the abundance in computational tools and resources, new techniques and algorithms are continuously being developed and tested in a variety of applications. This Special Issue welcomes papers from all fields of applied mathematical modeling and machine learning (in particular, algorithms based on neural networks), where the emphasis is placed on the application of techniques and algorithms to physical/engineering/medical/social systems. Novel applications from all fronts of machine learning will also be considered. Research in areas where both approaches work in synergy, complementing one another in the modeling of complex systems, are particularly welcome.

Guest Editors

Prof. Dr. Nicholas Christakis

Prof. Dr. George Kossioris

Prof. Dr. Mayur Patel

Deadline for manuscript submissions

closed (29 February 2024)

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Mathematics

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About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

Editor-in-Chief

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