



## Applications of Mathematical Modeling and Neural Networks

Guest Editors:

**Prof. Dr. Nicholas Christakis**

Department of Mathematics and Applied Mathematics, University of Crete, 71003 Heraklion, Greece

**Prof. Dr. George Kossioris**

Department of Mathematics and Applied Mathematics, University of Crete, 71003 Heraklion, Greece

**Prof. Dr. Mayur Patel**

Computational Mechanics and Reliability Group (CMRG), Centre for Numerical Modelling and Process Analysis, University of Greenwich, 30 Park Row, London SE10 9LS, UK

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### 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.





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## Editor-in-Chief

**Prof. Dr. Francisco Chiclana**  
School of Computer Science and  
Informatics, De Montfort  
University, The Gateway,  
Leicester LE1 9BH, UK

## 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.

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*Mathematics* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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