Special Issue

Theory and Multidisciplinary Applications of Computational Intelligence

Message from the Guest Editor

I am delighted to announce a Special Issue focused on "Theory and Multidisciplinary Applications of Computational Intelligence" in Mathematics. This initiative emerges at a crucial juncture in technological evolution, where computational intelligence (CI) has transformed from a theoretical concept into a driving force behind modern technological advancement. This Special Issue aims to explore both the mathematical foundations of CI and its innovative applications, organised into two primary categories:

I. Theoretical Foundations:

- Mathematical frameworks for neural networks and deep learning;
- Theoretical aspects of fuzzy systems and uncertainty modelling;
- Convergence analysis in evolutionary computation;
- Mathematical foundations of hybrid CI systems.

II. Multidisciplinary Applications:

- Mathematical foundations enabling CI applications in engineering;
- Theoretical advances supporting applications in complex systems;
- Mathematical validation of CI methodologies;
- Scalability and convergence analysis in applied contexts;
- Uncertainty quantification frameworks for real-world problems.

Guest Editor

Dr. Yi Chen

School of Intelligent Manufacturing Ecosystem, XJTLU Entrepreneur College (Taicang), Xi'an Jiaotong-Liverpool University, Suzhou 215000, China

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

mdpi.com/journal/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

Prof. Dr. Francisco Chiclana

School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK

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