

# Special Issue

## Application of Advanced Computing and Artificial Intelligence in Engineering and Science, 2nd Edition

### Message from the Guest Editors

The second edition of "Application of Advanced Computing and Artificial Intelligence in Engineering and Science" builds upon the rapid evolution of artificial intelligence (AI) over the past decade. What was once confined to scientific experimentation in laboratories has now blossomed into powerful real-world applications across various industries. This remarkable progress encompasses a diverse array of AI methods and techniques, spanning both symbolic and sub-symbolic information processing. These approaches have matured over a relatively short history of just over 50 years and can be categorized into three interlinked classes, which encompass representation, reasoning, and learning methods. This new edition places a strong emphasis on the integration of modern AI techniques with advanced computing technologies, enabled by computer networks and emerging computing architectures. Key contemporary trends in advanced computing architectures, such as high-performance computing, cloud computing, edge computing, and fog computing, as well as the Internet of Things (IoT), distributed ledgers, and blockchains, are thoroughly explored.

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### Guest Editors

Prof. Dr. Costin Badica

Dr. Kalliopi Kravari

Prof. Dr. Nick Bassiliades

Dr. Theodoros Kosmanis

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### Deadline for manuscript submissions

closed (31 May 2025)



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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.

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### Editor-in-Chief

Prof. Dr. Francisco Chiclana  
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