

# Special Issue

## Applications of Artificial Intelligence and Pattern Recognition

### Message from the Guest Editors

In the context of this special issue, researchers are encouraged to explore how mathematical modelling and analysis techniques can be applied to improve AI algorithms and systems. Optimization methods may be employed to develop efficient algorithms capable of handling large datasets in real-time. Numerical methods can be used to analyze and solve complex mathematical models that arise in AI applications. Control theory methods may be developed to ensure that AI systems operate safely and effectively in various environments. Additionally, network technology can be leveraged to enhance the scalability and performance of distributed AI systems. By utilizing these mathematical approaches, researchers can improve the theoretical foundations of AI and devise practical solutions to real-world problems. Topics include but are not limited to:

- Computer vision;
- Pattern recognition;
- Optimization methods;
- Numerical methods for intelligent systems;
- Financial technology;
- Smart Manufacturing.

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### Guest Editors

Prof. Dr. Yen-Lin Chen

Dr. Wai-Khuen Cheng

Prof. Dr. Hsin-Hui Hu

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### Deadline for manuscript submissions

closed (31 March 2024)



## 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

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