



## Metaheuristics and Artificial Intelligence: Latest Advances and Prospects

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### Message from the Guest Editors

Metaheuristics and artificial intelligence have become increasingly important in solving complex optimization problems in various fields. Metaheuristics are powerful search algorithms. On the other hand, artificial intelligence (AI) techniques, including machine learning, deep learning, and neural networks, have shown remarkable success in solving many real-world problems.

The topics covered in this Special Issue include, but are not limited to, optimization algorithms, metaheuristics, swarm intelligence, genetic algorithms, evolutionary computation, artificial neural networks, fuzzy logic, machine learning, deep learning, and hybrid systems. This Special Issue also focuses on the importance of explainable artificial intelligence (XAI) techniques which aim to provide interpretable and transparent models and algorithms to enhance the understanding and trustworthiness of the decision-making process in AI systems. This Special Issue highlights the ability of these techniques to solve a wide range of problems in diverse areas such as engineering, finance, healthcare, and transportation.





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## 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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