

## Special Issue

# AI-Driven Engineering Optimization

### Message from the Guest Editors

This Special Issue invites researchers, practitioners and engineers to share work at the intersection of AI, machine learning and engineering optimization to explore cutting-edge advancements, practical applications and future directions in AI-driven optimization across engineering domains, topics of interest include but not limited to:

- AI/ML techniques for engineering optimization
  - AI techniques: Neural networks, machine learning.
  - Evolutionary computation: including genetic algorithms, particle swarm optimization, ant colony optimization and differential evolution etc.
  - Hybrid models combining AI with traditional numerical methods.
  - Generative /Multimodal optimization: explore new solutions.
  - Design automation.
  - Data-driven optimization.
- Applications across Engineering Disciplines
  - Aerospace, automotives, civil, mechanical, chemical and energy systems etc.
  - Real-time optimization for robotics and smart engineering design.
  - Large scale engineering optimization.
  - AI applications in engineering optimization.

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### Guest Editors

Dr. Jian-Ping Li

Dr. Mudhar Al-Obaidi

Dr. Qingsheng Li

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### Deadline for manuscript submissions

31 December 2025



## Algorithms

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## About the Journal

### Message from the Editor-in-Chief

Algorithms are the very core of Computer Science. The whole area has been considered from quite different perspectives, having led to the development of many sub-communities: Complexity theory (limitations), approximation or parameterized algorithms (types of problems), geometric algorithms (subject area), metaheuristics, algorithm engineering, medical imaging (applications), indicates the range of perspectives. Our journal welcomes submissions written from any of these perspectives, so that it may become a forum for exchange of ideas between the corresponding scientific subcommunities.

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### Editor-in-Chief

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