Special Issue

Ensemble Evolutionary Algorithms and Machine Learning for Solving Complex Optimization and Scheduling Problems

Message from the Guest Editors

This Special Issue deals with modeling, optimizing and scheduling challenges of engineering problems by integrating swarm/evolutionary algorithms and machine learning, specifically aiming at their most recent developments and applications for various complex scheduling and optimization problems. Potential topics include (but are not limited to) the following:

- Multi-objective, multi-task, and multi-constraint optimization
- Large-scale global optimization
- Ensemble swarm and evolutionary algorithms with machine learning algorithms
- Learning-based meta-heuristics

Swarm and evolutionary algorithms for:

- Production scheduling problems
- Energy-efficiency scheduling problems
- Traffic signal control, optimization, and scheduling
- Vehicle routing problems
- Task assignment and routing planning
- Project scheduling
- Grid/cloud scheduling
- Scheduling and optimization in smart city, smart building and home, and sustainability systems
- New real-world and innovative applications of ensemble with machine learning algorithms

Guest Editors

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Deadline for manuscript submissions

closed (31 July 2025)



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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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