

# Special Issue

## Optimization and Resource Allocation in Cloud and Edge Computing

### Message from the Guest Editor

The evolution of IoT and next-gen networks has shifted digital services toward a cloud–edge–end architecture. While cloud centers manage large-scale analytics, edge nodes handle latency-sensitive tasks locally. This structure demands sophisticated task scheduling and resource allocation to balance energy, cost, and response times. Furthermore, the rise of AI and privacy concerns requires edge systems to handle higher throughput while processing sensitive data closer to the user. This Special Issue focuses on the latest optimization strategies in cloud and edge domains. We invite research on convex and nonconvex optimization for scheduling, game-theoretic incentive design, and graph-based routing. We also seek work on learning-assisted optimization—including reinforcement and federated learning—alongside adaptive algorithms for dynamic workloads and stochastic models for reliability. Submissions should leverage tools such as combinatorial optimization, stochastic processes, and distributed algorithms. Whether addressing AI-driven inference or system-wide resource management, our goal is to foster practical solutions that advance the efficiency of next-generation digital services.

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### Guest Editor

Dr. Wei Chang

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### Deadline for manuscript submissions

30 November 2026



## Mathematics

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### Message from the Editor-in-Chief

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### Editor-in-Chief

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