

Special Issue

Advances of Optimization Theory and Applications

Message from the Guest Editors

This Special Issue, *“Advances in Optimization Theory and Applications,”* invites researchers and practitioners to explore advanced optimization techniques and their impactful applications in fields such as mobile computing, energy efficiency, LLM-based optimization, federated learning, and edge computing. Optimization theory is vital for enhancing performance, efficiency, and user experience in real-time systems, machine learning, logistics, healthcare, finance, and communication networks. We welcome original studies presenting theoretical advances or innovative solutions to challenges like limited computational resources, power constraints, latency sensitivity, and dynamic environments. Topics of interest include adaptive resource allocation, energy-aware scheduling, low-latency optimization, federated learning, network design, logistics optimization, and real-time data processing. By linking theory with practice, this Special Issue aims to foster efficient and intelligent systems. Submissions should feature rigorous analysis, novel methods, and demonstrated applicability.

Guest Editors

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Deadline for manuscript submissions

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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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