# Special Issue

# AI-Driven Distributed Control & Optimization Algorithms for Networked Systems

## Message from the Guest Editor

As networked systems have grown in complexity, advanced distributed strategies are urgently needed to further enhance system performance. In addition, the rapid evolution of artificial intelligence (AI) has unlocked novel avenues for designing distributed algorithms. Such innovations are poised to significantly enhance the autonomy, self-governance, and intelligence of networked systems. This Special Issue will specifically focus on AI-driven distributed control & optimization algorithms, addressing critical challenges around scalability, robustness, and adaptability, and thereby advancing the theoretical foundations and practical applications of next-generation networked systems. Contributions should integrate cutting-edge AI methodologies with distributed control & optimization frameworks to achieve breakthroughs in system efficiency and resilience. Finally, we would like to thank Mr. Jing-Zhe Xu for his help in the creation of this Special Issue.

## Guest Editor

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## Deadline for manuscript submissions

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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.

### Editor-in-Chief

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