

# Special Issue

## Federated Learning and Edge Intelligence: Mathematical Models, Algorithms, and Applications

### Message from the Guest Editor

This Special Issue aims to delve into the application of Federated Learning (FL) and Edge Intelligence (EI) on resource-constrained devices, a field that not only faces unique challenges but also offers groundbreaking opportunities at the forefront of modern artificial intelligence research. The importance of this research area lies in its potential to drive profound transformations across multiple domains, from the Internet of Things to mobile computing, reflecting the evolving complexity of data processing and computation in today's world. The goal of this Special Issue is to explore both the theoretical foundations of FL and EI in resource-constrained environments and their practical implementations, while advancing the journal's commitment to publishing significant technological breakthroughs. Our objective is to gather research that showcases innovative mathematical models, algorithms, and applications relevant to FL and EI on resource-constrained devices. These contributions will provide a comprehensive perspective on the mathematical challenges and solutions within these interconnected fields.

### Guest Editor

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### Deadline for manuscript submissions

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### 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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### Editor-in-Chief

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