

Special Issue

Distributed Systems: Methods and Applications

Message from the Guest Editor

Over the past five decades, distributed systems have been the subject of research, steadily growing in significance. With the expansion of the internet and networked computing and with the transition from single-core computers to parallel systems, the importance of distributed computing has reached unprecedented levels. In the design and development of efficient systems, empirical methods have their limits due to the costs and complexity involved. This amplifies the significance of modelling and analysing aspects of distributed systems, such as security or replication, theoretically and through simulations. We welcome submissions that explore new approaches and applications in the field of distributed systems. Topics include, but are not limited to, the following:

- High-performance and parallel computing;
- Distributed algorithms and data structures;
- Cloud, fog, and edge computing;
- Serverless computing;
- Microservice architectures;
- Internet of Things;
- Distributed operating systems;
- Distributed storage systems;
- Federated learning;
- Consensus and leader election algorithms;
- Population protocols;
- Blockchains.

Guest Editor

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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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