# **Special Issue**

## Recent Advances in Federated Learning Algorithms

## Message from the Guest Editors

We invite researchers and practitioners to submit original research papers on the following topics related to federated learning (but not limited to):

- Federated learning frameworks;
- Privacy-preserving machine learning algorithms;
- Adversarial attacks on distributed learning paradigms;
- Algorithms to defend against data poisoning and backdoor attacks;
- Gradient leakage vulnerabilities in federated learning;
- Performance fairness across clients under federated learning algorithms;
- Privacy and security in federated learning;
- Federated learning for edge computing and IoT;
- Real-world applications and case studies of federated learning;
- Federated learning algorithms for handling data imbalance issues both locally and globally on clients and server, respectively;
- Federated learning algorithms to address client selection using replacement and without replacement techniques;
- Integrating knowledge distillation in federated learning algorithms.

## **Guest Editors**

Dr. Ashish Gupta

Dr. Yuyi Mao

Dr. Rahul Mishra

Deadline for manuscript submissions

closed (29 February 2024)



## Algorithms

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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

Prof. Dr. Frank Werner

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