Special Issue

From Edge Devices to Cloud Computing and Datacenters: Emerging Machine Learning Applications, Algorithms, and Optimizations

Message from the Guest Editor

In the last decade, machine learning has emerged as an important tool for a tremendous number of applications, such as computer vision, medicine, fintech, autonomous systems, speech recognition, and many others. Machine learning models offer state-of-the-art accuracy and robustness in many applications. The increasing deployment of machine learning algorithms from edge and IoT devices to high-end computational infrastructures, such as supercomputers, the cloud, and datacenters, introduces major computational challenges due to the growing amount of data and also the major growth in their model size and complexity. This Special Issue looks for novel developments of emerging machine learning applications, algorithms, and optimization in diverse computational platforms such as:

- Novel IoT and edge devices' machine learning applications;
- High-performance computing machine learning algorithms;
- Machine learning applications in cloud and fog computing;
- Fusion of machine learning models between edge and cloud;
- Machine learning optimization methods such as pruning and deep compression.

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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