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Recent Advances of Neural Network Optimization and Algorithms in Deep Learning

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Message from the Guest Editor

In recent years, neural networks, as one of the hottest artificial intelligence technologies, have made breakthroughs and driven the rapid development of science and technology. However, due to the complexity of neural network structures and algorithm optimization, their future development still faces many challenges. The optimization of neural networks is a key factor in improving their performance. This Special Issue aims to demonstrate (1) weight initialization, optimization and regularization of neural network algorithms; and (2) adaptive learning, distributed learning and reinforcement learning in neural networks.

Original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- 1. Weight initialization, optimization and regularization in neural network algorithms;
- 2. Adaptive learning, distributed learning and reinforcement learning in neural networks;
- 3. A review of recent advances of neural network optimization and algorithms.



Specialsue







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Message from the Editor-in-Chief

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