Special Issue

Symmetry and Asymmetry in Machine Learning: 2nd Edition

Message from the Guest Editors

Machine learning focuses on the design and analysis of algorithms that enable computers to learn autonomously. It is widely applied across many fields, including image recognition, speech recognition, natural language processing, recommendation systems, classification, and prediction. This Special Issue aims to provide a platform for researchers to share their latest advances in neural networks and deep learning, as well as studies on the relationship between machine learning and symmetry and their applications to solving real-world problems. Topics of interest for this Special Issue include, but are not limited to, the following:

- Faster and more robust methods for training deep models;
- Advances in fuzzy neural networks, spiking neural networks, extreme learning machines, and support vector machines;
- Machine learning applications in computer vision, speech recognition, natural language processing, and robotics;
- Deep neural network optimization and regularization technology;
- Deep learning for data analysis and prediction;
- Adversarial machine learning and its applications;
- Symmetric and asymmetric neural networks.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

Editor-in-Chief

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