Special Issue

Symmetry/Asymmetry Studies in Data Mining & Machine Learning

Message from the Guest Editors

Symmetry and asymmetry are fundamental properties in data mining and machine learning, influencing model design and performance. Symmetric measures like cosine similarity and Jaccard similarity, as well as symmetric kernels in SVMs, ensure consistent interactions between data points. Asymmetry, however, plays a role in directional relationships, such as sentiment analysis using antisymmetric matrices. Contributions are sought on the role of these properties in theory, algorithms, and applications, including computational, information-theoretic, and geometric interpretations. We encourage novel insights bridging symmetric and asymmetric techniques to advance the field.

Guest Editors

Dr. Hui Li

Department of Computer Science and Technology, Beijing University of Chemical Technology, Beijing 100029, China

Dr. Tianyu Shen

College of Information Science and Technology, Beijing University of Chemical Technology, Beijing 100029, China

Deadline for manuscript submissions

31 December 2025

Symmetry

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 5.3

mdpi.com/si/234090

Symmetry
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
symmetry@mdpi.com

mdpi.com/journal/symmetry

Symmetry

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 5.3

mdpi.com/journal/symmetry

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

Prof. Dr. Sergei Odintsov
1. ICREA, 08010 Barcelona, Spain
2. Institute of Space Sciences (IEEC-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within SCIE (Web of Science), Scopus, CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Multidisciplinary Sciences) / CiteScore - Q1 (General Mathematics)

MDPI