Special Issue

Applications Based on Symmetry in Adversarial Machine Learning

Message from the Guest Editors

- Symmetry is a fundamental concept in adversarial machine learning that offers new opportunities to improve the robustness, security, and interpretability of modern learning systems. By harnessing symmetrical properties in data and model architectures, researchers can develop more effective defenses, identify vulnerabilities, and enhance the overall reliability of deep neural networks, large language models, and foundation models. As machine learning technologies increasingly permeate safety-critical applications, exploring symmetry in adversarial contexts is crucial for ensuring trustworthy and dependable AI systems.

- This Special Issue, "Applications Based on Symmetry in Adversarial Machine Learning", aims to bring together researchers and practitioners from diverse backgrounds to share their latest findings, methodologies, and advancements in this evolving field. We are particularly interested in studies that explore the interplay between symmetry and adversarial learning in areas such as computer vision, natural language processing, network security, autonomous systems, and large language models...

Guest Editors

Dr. Wanlun Ma

Dr. Yiliao Song

Dr. Xiao Chen

Deadline for manuscript submissions

31 January 2026

Symmetry

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)