

## Special Issue

# Recent Advances of Computational and Mathematical Applications in Deep Learning

### Message from the Guest Editors

The Special Issue is aimed toward recent theoretical advances and practical computational and mathematical applications in deep learning. The editors would like to provide an opportunity to present state-of-the-art research on the development of cutting-edge neural network model architectures, the understanding, explainability, and interpretability of deep learning models, their mathematical bias and fairness, robustness, and ethical and societal regulations and considerations, including but not limited to subjects such as image recognition, retrieval, generation and processing, speech, speaker and emotion recognition and synthesis, style translation, generative adversarial models, reinforcement learning, transfer learning, natural language processing, attention mechanisms, transformer-based networks, sequence modelling, data augmentation, time series analysis, etc. We hope that the initiative will be attractive to deep learning researchers and experts in mathematical and computational deep learning applications, and we highly encourage you to submit your current research for peer review before the deadline.

---

### Guest Editors

Dr. Branislav Popovic

Dr. Marko Janev

Dr. Lazar Kopanja

---

### Deadline for manuscript submissions

closed (30 July 2024)



## Axioms

---

an Open Access Journal  
by MDPI

---

Impact Factor 1.6



[mdpi.com/si/177381](https://mdpi.com/si/177381)

*Axioms*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[axioms@mdpi.com](mailto:axioms@mdpi.com)

[mdpi.com/journal/  
axioms](https://mdpi.com/journal/axioms)





# Axioms

---

an Open Access Journal  
by MDPI

---

Impact Factor 1.6



[mdpi.com/journal/  
axioms](https://mdpi.com/journal/axioms)



## About the Journal

### Message from the Editor-in-Chief

*Axioms* is dedicated to the foundations (structure and axiomatic basis, in particular) of mathematical theories, not only from a crisp or strictly classical sense, but also from a fuzzy and generalized sense. This includes the more innovative current scientific trends, devoted to discover and solve new challenging problems. The prime goal of *Axioms* is to publish first-class, original research articles under an open access policy with minimal fees for the authors. We would be pleased to welcome you as one of our authors.

---

### Editor-in-Chief

Prof. Dr. Humberto Bustince

Department of Statistics, Computer Science and Mathematics, Public  
University of Navarra, 31006 Pamplona, 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), dblp, and other databases.

#### Journal Rank:

JCR - Q2 (Mathematics, Applied)