

## Special Issue

# Randomized Neural Networks and Deep Learning: Research Frontiers and Cutting-Edge Applications

### Message from the Guest Editors

Recent research in deep learning is expanding the limits of what can be achieved in different areas, including computer vision, biometrics, robotics, telecommunications, healthcare, agriculture, and more. Recommended topics include, but are not limited to, the following:

- General Machine Learning (active learning, clustering, online learning, ranking, Reinforcement learning, supervised, semi- and self-supervised learning, time series analysis, among others);
- Extreme learning machines (improved/extended full-complex ELM, parallel and distributed computing of ELM, novel semi-supervised/unsupervised ELM, real applications and comparison with the benchmarking IA models, beyond fundamentals, among others);
- Deep learning (architectures, generative models, deep reinforcement learning, convolutional neural networks and vision transforms, among others);
- Learning theory (bandits, game theory, statistical learning theory, among others);
- ML/DL applications (biometrics, telecommunications, healthcare, agriculture, pattern recognition, smart traffic system, smart grid, autonomous vehicles, etc.).

### Guest Editors

Dr. David Zabala-Blanco  
Dr. Ruber Hernández-García  
Prof. Dr. Sergio A. Velastin

### Deadline for manuscript submissions

30 July 2026



## Applied Sciences

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

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## About the Journal

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, Italy

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