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Deep Neural Networks: Theory, Algorithms and Applications

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Message from the Guest Editors

Machine Learning (ML) algorithms, as a central branch of Artificial Intelligence (AI), are changing how automatic classification tasks are solved. Moreover, thanks to the progress in hardware technologies, the researchers are experimenting with a significant change oriented to using Deep Learning (DL) techniques instead of traditional ML. Nowadays, DL can be implemented not only in powerful computers but also in mobile devices.

This Special Issue aims to help the scientific community disseminate new theories, advances, and applications regarding Deep Neural Networks. We welcome theoretical and practical papers. Topics of interest include, but are not limited to:

- Novel Deep Neural Networks Architectures.
- Theoretical Explanations of Deep Neural Networks.
- Applications of Deep Neural Networks.
- Transfer Learning in Deep Neural Networks.
- Managing Extensive and Short Data Sets with Deep Neural Networks.
- Integration of Hybrid Models.
- Hardware implementation of Deep Neural Networks.







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Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The iournal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering sociology. particularly those that and stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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