

## Special Issue

# Machine Learning and AI for Big Data Analytics and Data Mining Applications

### Message from the Guest Editor

We seek papers focusing on the application of ML and AI technologies, such as deep learning, natural language processing, and predictive modeling, to process and analyze big data efficiently. Topics of interest include, but are not limited to, the following:

- Applications of large language models for advanced analytics and predictive tasks;
- Fraud detection and anomaly identification;
- Personalized marketing and customer behavior analytics;
- Healthcare diagnostics and medical data analysis;
- Recommendation systems and predictive analytics;
- Financial forecasting and risk management;
- Traffic flow analysis and congestion prediction;
- Air quality monitoring and pollution level prediction.

Contributions addressing key challenges, such as data scalability, privacy, and real-time processing, are particularly welcome. We also encourage submissions highlighting novel methods for automated data mining to discover patterns, trends, and anomalies without explicit programming, as well as case studies demonstrating cross-industry innovation.

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### Guest Editor

Prof. Dr. Shi-Jinn Horng  
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### Deadline for manuscript submissions

closed (30 August 2025)



## Applied Sciences

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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  
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