

## Special Issue

# Big Data Technology and Its Applications

### Message from the Guest Editors

We welcome high-quality submissions that explore topics including, but not limited to, the following:

**- Theoretical advances:**

- Novel AI architectures for data mining.
- Federated learning, edge computing, and distributed frameworks for scalable data processing.

**- Applications in specific domains:**

- Healthcare: AI-driven diagnostics, personalized medicine, and patient data analytics.
- Finance: Fraud detection, risk assessment, and algorithmic trading via AI.

**- Methodological approaches:**

- Hybrid systems combining AI with traditional data mining techniques.
- Real-time data processing for dynamic environments.

**- Ethical and practical considerations:**

- Mitigating bias and ensuring fairness in AI-driven decision-making.
- Data privacy, security, and compliance in large-scale deployments.
- Case studies on operational challenges and success stories.

**- Future trends and perspectives:**

- Forecasting the role of AI in the evolution of data mining.
- Cross-disciplinary synergies.
- Speculations on next-generation data processing paradigms.

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### Guest Editors

Dr. Zhonghong Ou

Dr. Kaize Shi

Dr. Qika Lin

Dr. Yifan Zhu

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### Deadline for manuscript submissions

20 October 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

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