

Special Issue

Advanced Applications with Machine Learning Methods in Applied Statistics

Message from the Guest Editors

This Special Issue of *Mathematics*, entitled "Advanced Applications with Machine Learning Methods in Applied Statistics", delves into the cutting-edge integration of traditional statistical methods with modern machine learning techniques. Key highlights include the following:

- **Comparative Analysis:** A thorough comparison of classical statistical techniques and machine learning algorithms in dealing with real-world data challenges.
- **Hybrid Models:** An exploration into models that blend the strengths of traditional statistical models with machine learning and deep learning for enhanced uncertainty quantification, predictive accuracy and interpretability.
- **Case Studies:** Real-world applications showcasing the efficacy of integrating machine learning methods in sectors such as healthcare, finance, and the environment.

Throughout this Special Issue, the authors emphasize the importance of understanding the underlying principles of both statistical and machine learning methods, promoting a holistic approach to data analysis.

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About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that 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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