Special Issue

Mathematical Methods in Machine Learning and Data Science

Message from the Guest Editors

This Special Issue is devoted to recent advances in the use of mathematical methods in data science and machine learning. It includes a range of topics of concern to scholars applying quantitative, optimization, combinatorial, logical, topological, geometrical, statistical, algebraic, and algorithmic methods to diverse areas of data science and machine learning. Novel methods, new applications, comparative analyses of models, case studies, and state-of-the-art review papers are particularly welcomed. Mathematical methods have underlain every major advancement in data science and machine learning—from reproducing kernel Hilbert spaces and back-propagation in the beginning to more recent methods such as random matrices and graph theory. As a response to the recent advancements, the objective of this Special Issue is to present a collection of notable mathematical and statistical methods in data science and machine learning. We invite scholars from all around the world to contribute to developing a comprehensive collection of papers on this important theme.

Guest Editors

Dr. Firuz Kamalov

Prof. Dr. Hana Sulieman

Dr. Ayman Alzaatreh

Deadline for manuscript submissions

closed (31 January 2025)

MDPI

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.

Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK

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