

Special Issue

Mathematical Methods in Machine Learning, Knowledge Graphs and Computer Vision

Message from the Guest Editor

The integration of mathematical methods in machine learning with knowledge graphs and computer vision has opened up a new frontier in the area of Artificial Intelligence. Knowledge graphs are structured semantic knowledge bases representing entities and their relationships and have become indispensable in various AI applications. Mathematical methods play a crucial role in optimization and algorithm design applications. This Special Issue invites submissions in areas emphasizing the synergy between knowledge graphs and multimodal data in machine learning and computer vision: mathematical theories and algorithms that enhance the construction and querying of knowledge graphs; multimodal learning approaches that integrate knowledge graphs with various data types, including text, images, and sensory data; applications of knowledge graphs to improve computer vision tasks such as object detection, image segmentation, and scene understanding; innovative uses of mathematical methods for analysis and interpretation of multimodal knowledge graphs; etc.

Guest Editor

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Deadline for manuscript submissions

closed (10 June 2025)



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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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