Special Issue

Machine Learning and Mathematical Methods in Computer Vision

Message from the Guest Editor

This Special Issue aims to explore the intersection of machine learning and mathematical methods in computer vision, highlighting their vital role in enhancing the performance and reliability of visual data processing algorithms. Mathematical modeling provides a rigorous framework for addressing complex challenges in computer vision, enabling the development of robust and efficient algorithms that can analyze and interpret vast amounts of visual information. The synergy between machine learning techniques and mathematical principles not only fosters innovative approaches to existing problems but also encourages interdisciplinary collaborations, resulting in breakthroughs that can significantly advance the computer vision field. We invite authors to contribute original research articles, reviews, and case studies that demonstrate novel applications of machine learning and mathematical methodologies in computer vision. Topics of interest include, but are not limited to, advanced mathematical techniques for image processing, model optimization, and novel machine learning architectures tailored for visual data analysis.

Guest Editor

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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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