Special Issue

Advanced Methods and Geometric Approaches for Computer Vision and Pattern Recognition

Message from the Guest Editors

This Special Issue aims to bring together original research, comprehensive surveys, and novel perspectives on contemporary or geometry-driven methodologies for computer vision and pattern recognition. The objective of this Special Issue is to promote dialog between the geometric computing community and mainstream computer vision researchers, fostering a deeper understanding of data representations and advancing robust solutions to practical visual recognition challenges. We welcome original research, comprehensive surveys, and visionary perspectives on the theoretical developments, algorithm design, and practical applications of both manifolds and/or linear spaces. Relevant topics include, but not limited to, the following:

- Theoretical aspects and computational methods for computer vision and pattern recognition in curved spaces.
- Riemannian optimization methods and algorithms on matrix manifolds.
- Riemannian geometry and its applications for computer vision and pattern recognition.
- Domain adaptation.
- Neuroimaging and medical image analysis.
- Computational forensics.
- Image set recognition.

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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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