

## Special Issue

# Self-Supervised Learning for Image Processing and Analysis

### Message from the Guest Editors

In the field of deep learning, self-supervised learning is a pivotal method utilizing unlabeled data to develop meaningful representations. This Special Issue aims to highlight recent advancements in self-supervised deep learning and their application in image processing and analysis. We invite original research and review articles contributing to the theoretical foundations, algorithmic progressions, and diverse applications of self-supervised learning in image processing. We welcome submissions covering various topics such as

- Novel self-supervised learning models and algorithms for image processing.
- Advances in contrastive learning, clustering, and generative models in image analysis.
- Applications in medical imaging, remote sensing, and multimedia analysis.
- Self-supervised learning for image segmentation, classification, and enhancement.
- The integration with other unsupervised, semi-supervised, and supervised learning paradigms.
- Evaluation metrics and benchmarks for self-supervised learning in image analysis.
- The interpretability and explainability of self-supervised deep learning models for image analysis.
- Challenges and opportunities in real-world scenarios.

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### Guest Editors

Dr. Chuang Niu

Dr. Qian Wang

Dr. Xin Cao

Dr. Shenghan Ren

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### Deadline for manuscript submissions

closed (31 July 2025)



## Journal of Imaging

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Impact Factor 3.3  
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*Journal of Imaging*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[jimaging@mdpi.com](mailto:jimaging@mdpi.com)

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## About the Journal

### Message from the Editor-in-Chief

The imaging term, specific with journal, is to be considered in its broadest sense. Image processing, image understanding and computer vision are all terms related to imaging acquisition, its processing and the extraction of relevant information from the scene to obtain the underlying knowledge. All tasks related to the above items are oriented toward specific applications in a broad range of areas and topics. The *Journal of Imaging* is conceived as an efficient vehicle in the scientific community for the communication and transmission of the progress and research results in the topics covered.

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### Editor-in-Chief

Prof. Dr. Raimondo Schettini

Department of Informatics, Systems and Communication, University of  
Milano-Bicocca, viale Sarca, 336, 20126 Milano, Italy

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