### **Special Issue**

# Unsupervised Deep Learning and Its Applications in Imaging Processing

### Message from the Guest Editors

Unsupervised deep learning methods—or self-supervised methods as they are sometimes called—open the possibility of quickly processing images that would have been otherwise impossible to analyse with regular deep learning methods. Yet, there are many challenges to the development of such methods that so far mostly rely on reconstruction loss functions from autoencoder models, and also suffer from issues similar to the ones faced by traditional unsupervised methods such as linking the elements of interest found by an unsupervised method with actual classes that are relevant to a real-world application.

For all these reasons, we invite you to submit your work related to unsupervised or weakly supervised applications of deep learning for image analysis, regardless of the field of application.

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### Deadline for manuscript submissions

closed (30 April 2022)



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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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