Machine Learning Methods for Solving Optical Imaging Problems

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Message from the Guest Editors

Dear Colleagues,

Over the recent years, consistent efforts have been put into applying machine learning methods to address various problems in optical imaging. Across a growing number of optical imaging techniques, machine learning shows better performance over conventional methods. This Special Issue aims to highlight the potentials of machine learning methods across a spectrum of optical imaging techniques, including optical coherence tomography, photoacoustic imaging, optical spectroscopy, super-resolution microscopy and polarization imaging. Additionally, the objective is to investigate potential improvements of deep learning methods by leveraging prior knowledge of optical imaging systems, also known as physics-informed deep learning. Lastly, it aims to explore other emerging deep learning frameworks from the broader academic community, such as vision transformer, to provide additional solutions for optical imaging problems.

In this Special Issue, original research articles and reviews are welcome. We look forward to receiving your contributions.

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Special Issue

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Message from the Editor-in-Chief

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