Special Issue

Advances in Information Theory and Machine Learning for Computational Imaging

Message from the Guest Editor

Over the past decade, computational imaging has advanced far beyond classical techniques, driven by the integration of deep learning with information–theoretic and statistical methods. These developments have enabled imaging systems to surpass their previous limits, leading to breakthroughs in medical imaging, remote sensing, industrial vision, and beyond. For this Special Issue, we are seeking cutting-edge contributions at the intersection of information theory, machine learning, and computational imaging, fostering the next generation of imaging technologies. Topics of interest include, but are not limited to the following:

- Inverse problems;
- Coherent imaging and phase retrieval;
- Information–theoretic analysis;
- Deep unfolding;
- Physics-informed machine learning;
- Emerging imaging paradigms.

Guest Editor

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Message from the Editor-in-Chief

The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.

Entropy is an online open access journal providing an advanced forum for the development and/or application of entropic and information-theoretic studies in a wide variety of applications. *Entropy* is inviting innovative and insightful contributions. Please consider *Entropy* as an exceptional home for your manuscript.

Editor-in-Chief

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