Special Issue

Information-Theoretic Approaches for Machine Learning and AI

Message from the Guest Editors

The aim of this Special Issue is to attract research investigations, from an information–theoretic perspective, addressing current challenges faced by theory and applications of machine learning. Prospective authors are invited to submit original research contributions on leveraging information theory and quantum information theory, in solving problems on (but not limited to) the following topics:

- Model interpretability;
- Reinforcement learning;
- Data compression and semantic communication;
- Federated learning;
- Large language models;
- Optimization;
- Sustainable AI;
- Security and privacy;
- Unbiasedness and fairness in AI.

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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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