

## Special Issue

# Representation Learning: Theory, Applications and Ethical Issues II

### Message from the Guest Editors

The purpose of this Special Issue is to highlight the state-of-the-art of the representation of learning both from a theoretical and a practical perspective, which has received a lot of attention from the research community. We particularly welcome work on information theory for deep and machine learning. In 2022, we will continue this trend with a 2nd volume. Possible topics include but are not limited to the following:

- Deep and shallow representation learning.
- Generative and adversarial representation learning.
- Robust representations for security.
- Representation learning for fair and ethical learning.
- Representation learning for interpretable machine learning.
- Representation learning under privacy constraints, e.g., federated learning.
- Representation learning in other domains, e.g., recommender systems, natural language processing, cybersecurity, process mining.
- Information-theoretic principles for the generalization and robustness of deep neural networks.
- Interpretation/explanation of deep neural networks with information-theoretic methods.
- Information-theoretic methods in generative models, causal representation learning and reinforcement learning

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### Guest Editors

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### Deadline for manuscript submissions

closed (30 November 2023)



## Entropy

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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.

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### Editor-in-Chief

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