



## Representation Learning: Theory, Applications and Ethical Issues II

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Deadline for manuscript  
submissions:

**closed (30 November 2023)**

### 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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## Editor-in-Chief

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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.

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