# **Special Issue**

## Information Theory in Machine Learning and Data Science

## Message from the Guest Editor

The purpose of this Special Issue is to highlight the state-of-the-art in applications of information theory to the fields of machine learning and data science. Possible topics include, but are not limited to, the following:

- Fundamental information-theoretic limits of machine learning algorithms
- Information-directed sampling and optimization
- Statistical estimation, optimization, and learning under information constraints
- Information bottleneck methods
- Information-theoretic approaches to adaptive data analysis
- Information-theoretic approaches to feature design and selection
- Estimation of information-theoretic functionals

### Guest Editor

### Prof. Dr. Maxim Raginsky

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### Deadline for manuscript submissions

closed (15 May 2018)



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## About the Journal

### 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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