# Special Issue

# Machine Learning and Entropy: Discover Unknown Unknowns in Complex Data Sets

## Message from the Guest Editor

In the real world, we are confronted, not only with complex and high-dimensional data sets, but also usually with noisy, incomplete, and uncertain data, where the application of traditional methods of knowledge discovery and data mining always entail the danger of modeling artifacts. Originally, information entropy was introduced by Shannon (1949), as a measure of uncertainty in data. Up to the present, many different types of entropy methods with a large number of different purposes and possible application areas have emerged. In this Special Issue we are seeking papers discussing advances in the application of learning algorithms and entropy for use in knowledge discovery and data mining, to discover unknowns in complex data sets, e.g., for biomarker discovery in biomedical data sets.

## Guest Editor

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## Deadline for manuscript submissions

closed (30 January 2016)

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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.

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