# **Special Issue**

# Entropy Based Inference and Optimization in Machine Learning

# Message from the Guest Editors

Many modern machine learning algorithms are deeply rooted in the principles of statistical and information physics. A prominent example is the method of Maximum Entropy and its relations to Bayesian inference and optimization. Entropy-based methods have found many applications in modern machine learning, ranging from natural language processing to the development of approximate algorithms for large-scale data analysis. This special issue aims to focus on recent advances in entropy-based methods for inference and optimization problems in machine learning. We welcome submissions making novel contributions to the subject, both foundational as well as applied.

# **Guest Editors**

Prof. Stephen Roberts

Department of Engineering Science & Oxford-Man Institute of Quantitative Finance, University of Oxford, Oxford, England, UK

Dr. Stefan Zohren

Department of Engineering Science & Oxford-Man Institute of Quantitative Finance, University of Oxford, Oxford, England, UK

## Deadline for manuscript submissions

closed (20 December 2019)



an Open Access Journal by MDPI

Impact Factor 2.0 CiteScore 5.2 Indexed in PubMed



mdpi.com/si/19189

Entropy
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
entropy@mdpi.com

mdpi.com/journal/entropy





an Open Access Journal by MDPI

Impact Factor 2.0 CiteScore 5.2 Indexed in PubMed



# **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

Prof. Dr. Kevin H. Knuth

Department of Physics, University at Albany, 1400 Washington Avenue, Albany, NY 12222, USA

#### **Author Benefits**

## Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

## **High Visibility:**

indexed within Scopus, SCIE (Web of Science), Inspec, PubMed, PMC, Astrophysics Data System, and other databases.

#### Journal Rank:

JCR - Q2 (Physics, Multidisciplinary) / CiteScore - Q1 (Mathematical Physics)

