



entropy



an Open Access Journal by MDPI

Entropy Based Inference and Optimization in Machine Learning

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)

Message from the Guest Editors

Dear Colleagues,

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.

Prof. Stephen Roberts
Dr. Stefan Zohren
Guest Editors



mdpi.com/si/19189

Special Issue



entropy



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Kevin H. Knuth

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

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.

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)

Contact Us

Entropy Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/entropy
entropy@mdpi.com
[X@Entropy_MDPI](https://twitter.com/Entropy_MDPI)