entropy

an Open Access Journal by MDPI

IMPACT FACTOR 2.1

Indexed in: PubMed

CITESCORE 4.9

Information Theoretic Learning and Kernel Methods

Guest Editors:

Prof. Dr. Badong Chen
Institute of Artificial Intelligence and Robotics, Xi'an Jiaotong University, 28 Xianning West Road, Xi'an 710049, China

Prof. Dr. Jose C. Principe
Computational NeuroEngineering Lab, University of Florida, Gainesville, FL 32611, USA

Deadline for manuscript submissions:
closed (31 August 2019)

Message from the Guest Editors

Dear Colleagues,

Information theoretic learning (ITL) was originally derived for supervised learning applications. The idea is that the error distribution in supervised learning is often non-Gaussian, therefore traditional mean square error (MSE) is not the optimal criterion to use, and in such case the information theoretic descriptors such as entropy can provide better nonlinear models in a range of problems from system identification to classification. On the other hand, kernel methods are powerful tool for nonlinear systems modeling in machine learning community. ITL and kernel methods are efficient approaches for learning a nonlinear mapping in non-Gaussian environments. In this Special Issue, we seek contributions that apply either information theoretic descriptors or kernel methods to deal with various machine learning problems. The scope of the contributions will be very broad, including theoretical studies and practical applications to regression, classification, system identification, deep learning, unsupervised learning and reinforcement learning and so on.

Prof. Dr. Badong Chen
Prof. Dr. Jose C. Principe
Guest Editors

entropy

IMPACT FACTOR 2.1 | Indexed in: PubMed | CITESCORE 4.9

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