# **Special Issue**

### Entropy for Data-Driven Decision-Making Problems

#### Message from the Guest Editors

Over the last few years, a need for data-driven decisionmaking modeling has arisen to deliver real-time solutions to problems by integrating models from the rapidly developing fields of machine learning, deep learning, and entropy. Machine learning is an approach for data analysis that constructs the analytical model by giving computer systems the ability to "learn." The concept of entropy was originally developed in the field of physics, but it is clear that entropy is deeply related to machine learning and deep learning. Furthermore, besides applications in machine learning, entropy is a general measure commonly used for the qualitative analysis of complex systems. In this regard, entropy is a powerful descriptive method that presents an operational and theoretical framework to attain both qualitative and quantitative descriptions of the intrinsic properties of machine learning and deep learning theories. In this Special Issue, we are interested in providing state of the art literature on entropy concepts and establishing a reliable connection between data-driven decision-making problems using machine learning and deep learning contexts.

#### **Guest Editors**

Dr. Abbas Mardani

Prof. Dr. Edmundas Kazimieras Zavadskas

Prof. Dr. Fausto Cavallaro

Deadline for manuscript submissions closed (31 May 2023)



an Open Access Journal by MDPI

Impact Factor 2.1 CiteScore 4.9 Indexed in PubMed



mdpi.com/si/141398

Entropy 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 2.1 CiteScore 4.9 Indexed in PubMed



entropy



## 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)