



an Open Access Journal by MDPI

Information Theory-Based Deep Learning Tools for Computer Vision

Guest Editors:

Prof. Dr. Jose Santamaria

Department of Computer Science, University of Jaén, 23071 Jaén, Spain

Prof. Dr. Francisco Roca

Department of Mathematics, University of Jaén, 23071 Jaén, Spain

Deadline for manuscript submissions: closed (16 September 2022)

Message from the Guest Editors

Artificial intelligence (AI) is a cross-disciplinary field of research that is generally concerned with developing and investigating systems that operate or act intelligently. In 1948, Claude Shannon, a mathematician and pioneer of AI, proposed the foundations of information theory (IT), and experts from both IT and AI have benefited since then.

Deep learning (DL) is a subset of AI, which is concerned with algorithms inspired by the structure and function of the brain. DL is creating many new applications in broad areas of science, particularly in the domain of computer vision (CV). These novel applications of DL to CV have increased in recent years. Specifically, in conventional applications of DL, a chosen algorithm learns the data and identifies hidden patterns during training. Then, the retrieved information is used for many purposes, e.g., classification.

Therefore, the goal of this Special Issue is to broadly engage the communities of IT, DL, and CV together in order to provide a forum for the researchers and practitioners related to this rapidly developed field, and share their novel and original research regarding the topic addressed by this Special Issue.









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, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/entropy entropy@mdpi.com %@Entropy_MDPI