electronics

an Open Access Journal by MDPI

IMPACT FACTOR 2.9

CITESCORE 4.7

Evolving Machine Learning and Deep Learning Models for Computer Vision (ECV)

Guest Editors:

Dr. Li Zhang
Department of Computer and Information Sciences, Faculty of Engineering and Environment, Northumbria University, Newcastle NE1 8ST, UK

Prof. Dr. Chee Peng Lim
Institute for Intelligent Systems Research and Innovation, Deakin University, Waurn Ponds, VIC 3216, Australia

Prof. Dr. Chengyu Liu
School of Instrument Science and Engineering, Southeast University, Nanjing 210096, China

Deadline for manuscript submissions:
closed (31 October 2021)

Message from the Guest Editors

Evolutionary algorithms have demonstrated superior global search capabilities and have been applied to diverse real-life single-, multi-, and many-objective optimisation problems. Deep learning models have demonstrated great success in dealing with complex computer vision tasks. Examples include the use of deep convolutional neural networks combined with recurrent models for image caption generation and visual question generation. Deep learning combined with transfer learning has also been employed to deal with various computer vision tasks. Nevertheless, the design of new and effective deep learning models and identification of the optimal hyper-parameters of the resulting models require profound domain knowledge, which may not always be available to researchers. In this regard, the superior search capabilities of evolutionary algorithms can be exploited to tackle such optimisation problems.

This Special Issue aims to stimulate research pertaining to not only feature selection, optimal topology, and hyper-parameter identification for clustering and classification systems but also evolving deep learning architecture generation through evolutionary algorithm and related paradigms.

electronics

IMPACT FACTOR 2.9

CITESCORE 4.7

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Flavio Canavero
Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

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), CAPlus / SciFinder, Inspec, and other databases.
Journal Rank: JCR - Q2(*Electrical and Electronic Engineering*) CiteScore - Q2 (*Electrical and Electronic Engineering*)

Contact Us

Electronics Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/electronics
electronics@mdpi.com
𝕏@electronicsMDPI