Special Issue

Interpretable Deep Learning in Electronics, Computer Science and Medical Imaging

Message from the Guest Editor

Artificial intelligence (AI), particularly, deep learning (DL), which involves automated feature extraction using deep neural networks (DNNs), has been used increasingly by electronics engineer, computer scientist, and physicians. AI can analyze computer vision and medical images at a level not possible by a single person. However, the resulting parameters are difficult to interpret.

The aim of the Special Issue is to help realize interpretable DL in electronics, computer science, and medical imaging, and help to establishing accountability in medical imaging to explain the classification results clearly. Topics of interest of this Special Issue include, but are not limited to:

Interpretable DL in electronics
Interpretable DL in computer science
Interpretable DL in medical imaging
Non-black-box machine learning
Interpretable large decision trees and random forests
Interpretable machine learning
Converting deep neural network to decision trees
Interpretable decision trees Welcome to contribute!

Guest Editor

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About the Journal

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.

Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

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