Special Issue

Novel Approaches to Neural Computation

Message from the Guest Editor

This Special Issue will focus on "Novel Approaches to Neural Computation", and we invite innovative and breakthrough ideas on implementing neural computation that goes beyond the limitations of the current SNN architectures to achieve features/functions not possible before to perform new tasks and/or improve the performance in existing applications and thereby pushing the boundaries of what is possible. Topics of interest include but are not limited to the following:

- Novel hardware-friendly neuron models, not limited to biophysical or biomimetic topologies;
- Innovative approaches to computing with spikes or events, especially using spike times or combining rate/time coding of spikes;
- Network architectures that use the potential of bursting neurons to demonstrate oscillations and rhythms;
- Applications and benchmarking using novel neural computation principles.

Guest Editor

Dr. Rajkumar Kubendran

Department of Electrical and Computer Engineering, University of Pittsburgh, Pittsburgh, PA 15261, USA

Deadline for manuscript submissions

closed (15 May 2024)

MDPI

Electronics

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

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

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) / CiteScore - Q1 (Electrical and Electronic Engineering)

Rapid Publication:

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).

MDPI