Methods, Analysis and Applications in Computational Neuroscience

Guest Editor:

Dr. Giovanny Sánchez
Instituto Politécnico Nacional,
ESIME Culhuacan, Av. Santa Ana
No. 1000, Ciudad de Mexico
04260, Mexico

Deadline for manuscript submissions:
20 May 2025

Message from the Guest Editor

Nowadays, bio-inspired algorithms play an important role in the development of modern applications. In particular, applications such as control theory, cybernetics, quantitative psychology, machine learning, artificial neural networks, artificial intelligence and computational learning theory have been significantly improved since most of them are highly inspired by diverse neural phenomena. Therefore, the study of the complex biophysical characteristics of neurons potentially allows for the development of better neurobiological computational systems. Inspired by differing dynamics and modulations, among others, recent neural algorithms have been created. These models have been proven to improve the computational capabilities of conventional systems. In addition, most of them have been used in practical applications.

This Special Issue aims to publish significant contributions considering theoretical approaches and practical problems in computational neuroscience.

Special Issue

Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and
Informatics, De Montfort
University, The Gateway,
Leicester LE1 9BH, UK

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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), RePEc, and other databases.
Journal Rank: JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Contact Us