



Recurrent Neural Networks: Algorithms Design and Applications for Safety Critical Systems

Guest Editor:

**Dr. Graziela Patrocínio
Figueredo**

Advanced Digital Research
Service, School of Computer
Science, The University of
Nottingham, Nottingham NG8
1BB, UK

Deadline for manuscript
submissions:

30 June 2024

Message from the Guest Editor

Recurrent Neural Networks (RNNs) are a category of Neural Networks that allow for capturing temporal dynamic behaviour from data. It has been widely applied to sequential data or time series data. Applications include natural language processing, prognostic and health management, healthcare, human behaviour detection, and other safety critical systems. RNNs are distinguished by their memory mechanism, as information from prior input layers of the network influence subsequent inputs and outputs. Several variations and modifications of RNNs are now found in the literature, such as GRUs, LSTMS, Bi-directional RNN, expanding the domains of applicability, as well as the effectiveness of these approaches to temporal data.





Editor-in-Chief

Prof. Dr. Frank Werner

Faculty of Mathematics, Otto-
von-Guericke-University, P.O. Box
4120, D-39016 Magdeburg,
Germany

Message from the Editor-in-Chief

Algorithms are the very core of Computer Science. The whole area has been considered from quite different perspectives, having led to the development of many sub-communities: Complexity theory (limitations), approximation or parameterized algorithms (types of problems), geometric algorithms (subject area), metaheuristics, algorithm engineering, medical imaging (applications), indicates the range of perspectives. Our journal welcomes submissions written from any of these perspectives, so that it may become a forum for exchange of ideas between the corresponding scientific subcommunities.

Author Benefits

Open Access : free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [ESCI \(Web of Science\)](#), [Ei Compindex](#), and [other databases](#).

Journal Rank: [CiteScore - Q2 \(Numerical Analysis\)](#)

Contact Us

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

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

mdpi.com/journal/algorithms
algorithms@mdpi.com
[X@Algorithms_MDPI](https://twitter.com/Algorithms_MDPI)