



Recurrent Neural Networks for Time Series Forecasting

Guest Editors:

Dr. Majdi I. Radaideh

Dr. Xingang Zhao

Dr. Yifeng Che

Dr. Mohammad G. Abdo

Deadline for manuscript
submissions:

closed (1 January 2023)

Message from the Guest Editors

Dear Colleagues,

This Special Issue invites researchers to present high-quality studies on RNN techniques for time series forecasting. Potential topics of interest include but are not limited to:

- Novel algorithms exploring advancements in LSTM and GRU for time series forecasting.
- Novel algorithms that combine RNN with advancements in machine learning such as bi-directional algorithms, attention mechanisms, transformers, and multiplicative LSTM for time series forecasting.
- Novel algorithms that explore ConvLSTM architectures for spatio-temporal forecasting.
- Novel algorithms allowing the use of evolutionary computation to optimize RNN weights and hyperparameters in forecasting.
- Novel algorithms for time series forecasting under uncertainty with the use of Gaussian processes or Bayesian techniques.
- Novel algorithms for time series forecasting with limited data.
- Parallel and distributed RNN algorithms to accelerate training on GPUs.
- Exploration of RNN autoencoders and/or transformers for time series anomaly detection.
- Engineering applications of RNN algorithms in all disciplines are welcomed, while applications in carbon-free energy are particularly encouraged.





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Editor-in-Chief

Prof. Dr. Sonia Leva
Department of Energy,
Politecnico di Milano, 20156
Milan, Italy

Message from the Editor-in-Chief

The new open access journal Forecasting provides an interdisciplinary forum for all aspects related to the immensely broad field of time series analysis and forecasting. The range of applications in forecasting is enormous, from energy forecasting or economic analysis of stock indices prediction, climate forecasting, chemical or natural process forecasting, etc. It is the aim of the journal to publish relevant topical contributions for the scientific community of forecasting in a timely manner. We would like to invite you to contribute to the journal by sending us your high quality research papers and would be pleased to welcome you as one of our authors.

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Forecasting Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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