

August 27th, 2023

Mor Peleg

(Editors-in-Chief)

Journal of Biomedical Informatics

University of Haifa, Department of Information Systems,
Haifa, Israel

Dear Editor of Journal of Biomedical Informatics,

I am submitting a manuscript for consideration for publication in “Time Series Analysis in Biomedical Informatics”. The manuscript is entitled “**A novel Reductive bias and Hybrid GRU-CNN(RB-GRU-CNN) model for prediction of PTB diagnostic ECG Time Series data**” authored by *Shahzeb Khan* and *Vipin Kumar*.

It has not been published elsewhere and it has not been submitted simultaneously for publication elsewhere. The Latex zipped file of the manuscript has been created in the prescribed format.

In this research, a hybrid **GRU-CNN** model has been proposed for the prediction of ECG in heart patients. The proposed model performances have been compared with traditional Deep learning models which shows that the model has performed better over various measures like MSE, RMSE, MAPE, and MAE. A novel Reductive bias model (RB-GRU-CNN) is proposed to improve GRU-CNN model. Further, statistical analysis of the results ensures that the model is distinct and better based on Friedman's ranking and Holms' procedure.

Thank you very much for your consideration.

Yours Sincerely,

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