Response To Reviewers

Reviewer 1:

The paper presents a hybrid deep learning-based solution for stock market prediction. The model includes a pure LSTM and an LSTM with CNN. I have the following concerns about this paper:

1) **The author should pay attention to the usage of capital letters for common nouns in the middle of the sentences.**
2) **The paper should also be checked for grammatical errors. For example, "Recent work highlights how Deep Learning can be in algorithmic trading."**
3) **The second paragraph in the introduction is not relevant in this paper and can be trimmed or removed completely.**
4) **Instead of writing "computationally cheaper and simple deep-learning solution", you can use the term computationally efficient and less complex deep-learning solution.**
5) **There is a lot of repetition in the paper, kindly remove it.**
6) **Quality of Fig.1, Fig.2, Fig.6, and Fig. 7 should be improved, in the current state, they are not readable.**
7) **Other figures like 10, 11, and 12 are also of very poor quality and not clear at all.**
8) **There is a type here, "The Moving average strategy predicts the annual yield to be 10.9%, whereas the Buy Hold, LSTM, and Hybrid CNN-LSTM have a comparable prediction with 202.5%, 19.97%, and 19.99%, respectively.**
9) **There are many deep learning-based stock prediction algorithms existing in the literature. The authors fail to discuss these works and do not provide any comparison with them either. The lack of comparison will reduce the value of the work and also without this it is hard to justify the architecture used in the work.**

Author's Response:

The author thanks the reviewer for their valuable time to review the paper, the author has following answers to the points mentioned by the reviewer:

1. Edited in the final CRC.
2. Reviewed and Corrected all Grammatical errors.
3. Trimmed paragraph-2 keeping relevant details necessary to support the manuscript and findings.
4. Improved the wordings.
5. Reviewed the repetitions and removed wherever necessary.
6. Improved the figured and converted to pdf without any compressions from the source.
7. Improved as mentioned above.
8. Fixed the typos, and reviewed the manuscript again for any other typos.
9. The study compares the proposed model with a mathematical (ARMA), traditional technique (Buy and Hold) and an existing deep learning (LSTM Time Series). The comparison is provided in results and evaluations section as plots and in tabular format. The strength of the architecture as described in abstract and model architecture is to reduce the execution time taken by existing and proven LSTM networks which is evident from the results and can be further tested by running the existing open-source package developed by the author.

Reviewer 2:

The methods are shown in the pipeline not described the pre-processing methods applied to the dataset. The paper formulation is good except that it is not depicted the other social or natural parameters in the dataset.

Author's Response:

The author thanks the reviewer for their valuable time to review the paper, the author has following answers to the points mentioned by the reviewer:

As mentioned in the introduction section of the study, analysing the social and natural factors are beyond the scope and the idea proposed in the study, but is an important aspect to be considered in the future, related works by the author.

Reviewer 3:

The author in this manuscript has presented a deep learning model (LSTM and CNN-LSTM) for analyzing and understanding the historical stock data, evaluated on four datasets. There are a few points that can further improve the paper.

1) **It is advised to improve the quality of the images (poor resolution).**
2) **All the figures and tables needs to be cited in the text.**
3) **More recent reported papers should be added in the literature.**

Author's Response:

The author thanks the reviewer for their valuable time to review the paper, the author has following answers to the points mentioned by the reviewer:

1. The resolutions of the images are improved in the final CRC and the source file is converted to pdf without any losses to the images.
2. Added in-text citation of the tables and figures based on the reviewer's comments.
3. Added related recent papers based on the scope and target aimed at by the author through this study.