**Response Letter**

**Manuscript Title:** Mobile Application Analysis and Forecasting App Ratings Before Usage with Hybrid Neural Network

**Manuscript No.:** ICAAIC-690

**Dear Editor,**

**Thank you for giving us the opportunity to submit a revised draft of our manuscript entitled " Proctor Net: “Mobile Application Analysis and Forecasting App Ratings Before Usage with Hybrid Neural Network”**.

**We appreciate the time and effort that you and the reviewers have dedicated in providing valuable feedback on our manuscript. We are grateful to the reviewers for their insightful comments. We have thoroughly addressed all the comments/recommendations and highlighted the changes within the manuscript.**

**Here is a point-by-point response to the reviewers’ comments and concerns.**

**Comments from Reviewer 1**

***Comment 1:*** *Mobile application analysis and forecasting app ratings before usage with hybrid neural network is the proposed title of this paper*

**Response: Yes**

***Comment 2:*** *How to achieve the evaluation process?*

**Response:** As per our experimental results , To achieve the evaluation process, start by gathering a dataset from the Google Play Store. Then, apply various regression techniques such as Bagging, Linear, Kernel Ridge, CatBoost, Gradient Boosting, XGBoost, Lasso, LightGBM, Sparse Regression, and a Hybrid Neural Network. Evaluate each model's performance using metrics like Mean Squared Error (MSE). Finally, compare the MSE values to determine the most accurate model for predicting app ratings.

***Comment 3:*** *How to perform the prediction process?*

**Response**: To perform the prediction process, first preprocess the data by cleaning and transforming features. Then, train the chosen model, such as the Hybrid Neural Network, using the dataset. Once trained, input new data into the model to generate predictions. Evaluate the model's performance using metrics like Mean Squared Error to ensure accuracy. Finally, deploy the model for real-time predictions on new app data from the Google Play Store.

***Comment 4:*** *How to achieve the efficient analysis?*

**Response:** To achieve efficient analysis, begin by carefully selecting relevant features from the dataset obtained from the Google Play Store. Utilize exploratory data analysis techniques to understand the data distribution and identify patterns. Implement appropriate regression models and algorithms, such as the ones mentioned in your study. Optimize model parameters and hyperparameters to enhance performance. Lastly, interpret the results and compare model performances using metrics like Mean Squared Error to ensure accuracy and efficiency in the analysis process.

***Comment 5:*** *Selection of algorithm needs more clarity*

**Response:**Thank you for the suggestion**.** we modified the paper accordingly.

***Comment 6:*** *Survey of literature is not systematic*

**Response:** Thank you for the suggestion.We modified accordingly in the paper in the literature survey.

***Comment 7:*** *How to achieve high accuracy?*

**Response:** We achieved high accuracy with the help of neural network and LightGBM.

***Comment 8:*** *How to improve the performance?*

**Response:** Experiment with different regression models and algorithms to find the most suitable one for dataset.

***Comment 9:*** *How to achieve the reliability?*

**Response:** To achieve reliability in app rating prediction, ensure data quality through preprocessing and cross-validation. Select appropriate evaluation metrics and compare performance with baselines for validation. Validate predictions externally and prioritize interpretability for transparency. Continuously monitor and update the model for sustained reliability in real-world scenarios.

***Comment 10:*** *Manuscript should be edited for proper English language, grammar, punctuation, spelling, and overall style.*

**Response:** Thank you for your suggestion.We modfied our manuscript accordingly.

**Comments from Reviewer 2**

**Comment 1:** *Mobile Application Analysis and Forecasting App Ratings Before Usage with Hybrid Neural Network is the proposed title of the paper.*

**Response:**Yes

**Comment 2:** *Abstract requires complete revision as more similarity is observed in this section.*

**Response:** Revised Abstract-App store platforms rely heavily on user reviews and ratings to inform potential users about application performance and drawbacks prior to installation. In this study, we conduct a thorough comparative analysis of various regression techniques using a dataset sourced from the Google Play Store. We evaluate the predictive accuracy of ten different models, including traditional regression methods and a novel Hybrid Neural Network approach. Our results demonstrate the superior performance of the Hybrid Neural Network in predicting app ratings, surpassing traditional regression models in terms of Mean Squared Error (MSE). By leveraging deep learning for feature extraction and combining it with the interpretability of classical regression techniques, our approach offers promising implications for accurate rating prediction and informed decision-making within application store platforms.

**Comment 3:** *The observations from Figures 2-3 should be highlighted by the authors.*

**Response:** Thank you for your suggestion.We modfied our manuscript accordingly.

**Comment 4:** *In addition, to underline the importance of conducting feasibility studies, literature from previous feasibility studies may be included in the Introduction and Discussion.*

**Response:** Thank you for your suggestion.We modfied our manuscript accordingly.

**Comment 5:** *There is evidence of research, but your need to relate it to your own study more needs more literature-based evaluation in discussion.*

**Response:** Thank you for your suggestion.We modfied our manuscript accordingly.

**Comment 6:** *Evaluation methodology should be strongly discussed. Novelty in the proposed design should be established through a comparative analysis.*

**Response:** Thank you for your suggestion.We modfied our manuscript accordingly.

**Comment 7:** *Conclusion and Future Scope should be improved related to the proposed work.*

**Response:** Thank you for your suggestion.We modfied our manuscript accordingly.

**Comment 8:** *Results section is very poorly formulated. The current form of result projection is completely unacceptable. All figures should be interpreted for their findings.*

**Response:** Thank you for your suggestion.We modfied our manuscript accordingly.