Reviewer’s report

Title: Predictive Models for Diabetes Mellitus Using Machine Learning Techniques

Version: 0 Date: 30 Mar 2019

Reviewer: Dilip Singh Sisodia

Reviewer's report:

This study is conducted on DM data set curated from restricted source and conclusions drawn may be valid for used dataset only. Only on the basis of reported results it is very difficult to generalize the findings on other DM datasets.

However, many ML models performed better than the proposed work using same evaluation measures on different DM datasets. Therefore, direct comparison will be more convincing with other data sets(publicly available) with existing contributions using same ML models.

Most of the cited reference are old Therefore, i recommend to include some more references and cite where necessary specially introduction section related work. Such as Sisodia, D. and Sisodia, D.S., 2018. Prediction of diabetes using classification algorithms. Procedia computer science, 132, pp.1578-1585.


(Optional)- There are possibilities to include some critical review of recent development in this field.

(Optional)-Perform some statistical significance test to validate the results.

It is already mentioned in the background that Logistic Regression has achieved an AROC of 85% by Wilson et.al. while the author has achieved an AROC 84% using LR and GBM which is lower than the previous experiment.

The model diagram may help better in understanding the experimental procedure.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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