

Review of: "Feature Selection and Classification of Type II Diabetes on High Dimensional Dataset"

Ameni Ellouze

Potential competing interests: No potential competing interests to declare.

I have carefully reviewed your submission entitled "Feature Selection and Classification of Type II Diabetes on High Dimensional Dataset". Please find attached my comments to revise the paper.

- >> The language usage throughout this paper needs to be improved; the author should do some proofreading on it.
- >> Your abstract does not highlight the specifics of your research or findings. Rewrite the Abstract section to be more meaningful. I suggest the following structure: Problem, Aim, Methods, Results, and Conclusion.
- >> The Introduction section is poorly written; it needs to be expanded to add the problems in the context of existing work and how the proposed algorithms and approach can be used to overcome them.
- >> The structure of the manuscript is poorly distributed; there is no synchronisation between the different parts of the paper. After the introduction section, I suggest putting the related works with more clarifications and highlights about the research gaps, then the proposed methodology, which details the proposed approach including the description of the dataset and the proposed algorithms, followed by the results and discussions section, and finally the conclusion.
- >> The methodology is not well written and detailed, highlighting the proposed approach, since the problems of this work are not clearly stated. There is ambiguity in statement understanding.
- >> I feel that more explanation would be needed on how the proposed method is performed, on what basis you reduced the features, what algorithms were used. You mentioned that you used all the ML algorithms (KNN, Nb, SVM, LR, RF, GBS), but in the manuscript, you gave a large part to NB and no comparison was made with the others. In this case, explain the choice of NB, the parameters used...
- >> For the figures, put the titles and give a brief explanation for each one. For example, you need to explain the blocks used in the first figure.
- >> References are missing and should be cited throughout the manuscript.
- >> The results obtained must be interpreted and clearly explained. Additional analysis is required at each experiment to show its main purpose. A comparison with the state of the art in the form of a table should be added.
- >> The conclusion should not include results, figures, or tables. Rewrite the conclusion section so that it clearly highlights the theoretical and practical implications of your research, discusses your contributions, and indicates the advantages and



limitations of your results.