

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

Mohammad Mahdi Ershadi<sup>1</sup>

1 Amirkabir University of Technology

Potential competing interests: No potential competing interests to declare.

This study focused on the methodology of information mining, which involves extracting significant patterns from historical data. This technique is commonly applied in various real-world applications such as web records, fraud detection, speech recognition, and healthcare. Artificial intelligence features are employed in information mining to predict future events based on models generated from reliable data. However, not all features obtained during data collection are relevant to the target class of the model. Feature selection is a process that selects the best subset of features in a dataset to enhance the performance of an information mining or machine learning algorithm. In this research, an empirical evaluation was conducted on the Naïve Bayesian classifier using the Pima Indian Type II Diabetes dataset. The evaluation compared the classifier's performance using all features versus a subset of features selected by predefined Python libraries, assessing the impact of high dimensionality on the Naïve Bayes Classifier's performance. Although this paper is appropriate, there are some improvement points with it.

- \* Separate literature review, introduction, background, and research flow sections.
- \* Utilize a table to summarize the literature review and represent the current gaps. Then, show the role of this study in closing some gaps.
- \* It is better to highlight the contributions and novelties of this paper in comparison with the literature review to show the current gaps and importance of this paper in a subsection.
- \* Present more details about the proposed model in this study.
- \* Present statistical tests to determine whether the proposed methods and other methods are statistically significantly different. Add more case studies to validate your results.
- \* It is better to update and review more references using up-to-date papers. A table to summarize the literature review is suggested, as well.
- \* In addition, the structure and text of this paper needs to be revised in a way that is more interesting to readers.

I hope these comments improve the quality of this paper in the next revisions.

