

Review of: "Rules Extraction, Diagnoses and Prognosis of Diabetes and its Comorbidities using Deep Learning Analytics with Semantics on Big Data"

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Potential competing interests: No potential competing interests to declare.

The overall quality of the manuscript is good; however, there are few areas that need to be considered for revision. Below are some of my observations.

1. Is the proposed deep learning architecture validated on publicly available datasets? If yes, please specify. The author should clarify how the proposed architecture incorporates semantics into deep learning analytics.
2. How can the proposed architecture be adapted to different health condition scenarios? And the author should explain how the proposed architecture's performance will be evaluated. Please provide details.
3. Statistical or data mining techniques are commonly used in disease diagnosis. How does the proposed architecture compare in terms of accuracy and speed?
4. How is privacy and security handled with the proposed deep learning architecture? And how did you decide on the different layers of the architecture in terms of their complexity and order?
5. How transferable is the proposed architecture to data from other countries and cultures? And could the proposed architecture be modified to distinguish between clinically similar diagnoses?
6. How can the automated diagnosis recommendations produced by the architecture be verified for accuracy?
7. The author should clarify how deep learning is used to diagnose and predict diabetes and its comorbidities and provide a detailed description of the dataset used in the research.
8. The author should analyze and evaluate how the accuracy, precision, and recall of diabetes and comorbidity diagnostics and prognostics are improved by using deep learning analytics with semantics on big data.
9. The author should explain the term 'Semantics' in the paper's title and how it is used to improve diagnostics and prognostics and outline the approaches used for pre-processing, training, and evaluating the deep learning model.
10. The author should qualitatively evaluate the impacts of deep learning analytics with semantics on big data for diagnosing and predicting diabetes and its comorbidities. Describe potential applications for deploying this model in medical institutions for clinical decision-making.