Review of: "Exploring machine learning techniques to develop predictive models to address unemployment rates in the implementation of Industry 4.0"

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Potential competing interests: No potential competing interests to declare.

The abstract of the article suggests that the author has conducted a review on the use of machine learning in developing predictive models to address unemployment rates in developing nations during the execution of I4.0. But the problem is that it is not clearly stated in the abstract. The abstract is very vague and does not have a proper flow.

Moreover, after reading the abstract and heading “Predictive Model” it looks like the author has developed a new machine learning-based model to predict unemployment rates but the whole article does not mention such a new proposed model and any results of its evaluation.

The author needs to focus on one thing in this article either to conduct a systematic literature review or develop/propose a new approach to predict unemployment rates.

The headings “Research Method” and “The literature review steps used in the study” mention the steps followed to conduct the review. But these steps are incomplete and vague. The research questions’ motivation is not properly written and does not match the research questions mentioned in the section “Define the research questions and search terms”. The research questions need to be rewritten along with a clear motivation behind framing the question.

Currently, this article is poorly written and does not have a correct flow of writing. The findings of the article need to be rewritten as per the research questions. Heading “The implications, recommendations, and future study” is not aligned with the results reported in the paper. These implications and recommendations can become stronger if the author follows the proper method to report the results of the review using formulated research questions

The article can report interesting findings regarding the use of machine learning in predicting unemployment rates if it can be updated after reading and following guidelines for conducting and writing the systematic literature review.

The author is suggested to read the following research papers to improve the article.

1. D. Rattan, R. Bhatia, M. Singh, Software clone detection: A systematic review, Inf. Softw. Technol. 55 (2013) 1165–1199. https://doi.org/10.1016/j.infsof.2013.01.008.
2. M. Kaur, D. Rattan, A systematic literature review on the use of machine learning in code clone research, Comput. Sci. Rev. 47 (2023). https://doi.org/https://doi.org/10.1016/j.cosrev.2022.100528.

3. B. Kitchenham, Procedures for performing systematic reviews, Jt. Tech. Report, Comput. Sci. Dep. Keele Univ. (TR/SE- 0401) Natl. ICT Aust. Ltd. (0400011T.1). (2004).
4. B. Kitchenham, S. Charters, Guidelines for performing systematic literature reviews in software engineering, Jt. Tech. Rep. Keele Durham Univ. UK, Tech. Rep. (2007).
5. B. Kitchenham, L. Madeyski, S. Member, SEGRESS : Software Engineering Guidelines for REporting Secondary Studies, IEEE Trans. Softw. Eng. XX (2022) 0–3. https://doi.org/10.1109/TSE.2022.3174092