

Review Form 3

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_120892
Title of the Manuscript:	Application of Machine Learning in the Characterization and Classification of Hazards in Underwater Operations in the Oil and Gas Industry in Nigeria
Type of the Article	Original Research Article

General guidelines for the Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

<u>Compulsory</u> REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	Yes. It is important to scientific community. In this research article, researcher has shown application of machine learning (ML) in the characterization and classification of hazards in underwater operations in the oil and gas industry. The Researcher has done his job in the country Nigeria.	
Is the title of the article suitable? (If not please suggest an alternative title)	Yes	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	Yes	
Are subsections and structure of the manuscript appropriate?	Yes	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	Yes, it classify the risk of underwater hazards provides an effective risk profiling of the hazards and consequently application of fit for purpose control measures. This study leverages clustering algorithms like K-Means and Agglomerative Hierarchical Clustering (AHC) to categorize hazards from underwater activities and distinguish high risk hazard groups. Questionnaire were used to collect data from 418 underwater workers across 5 Niger Delta oil and gas companies assessing likelihood, frequency, and severity perspectives across 20 potential hazards.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :	Yes, the references are sufficient and recent.	
<u>Minor</u> REVISION comments Is the language/English quality of the article suitable for scholarly communications?	Yes, It is in English and the quality of language of the article is suitable for scholarly communications.	
<u>Optional/General</u> comments		

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PART 2:

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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