Review Form 3

Journal Name:	**Journal of Engineering Research and Reports**
Manuscript Number:	**Ms_JERR_129972**
Title of the Manuscript:	**Scalable Anomaly Detection with Machine Learning: Techniques for Managing High-Dimensional Data Streams.**
Type of the Article	**Review Article**

<mark>**PART 1:**</mark> **Comments**

	Reviewer's comment	Author's Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	This manuscript is highly relevant for the scientific community as it addresses the critical need for scalable and real-time anomaly detection in high-dimensional data streams. By exploring advanced machine learning techniques such as autoencoders, Isolation Forest, and PCA, the study provides robust solutions for anomaly detection across various industries, including finance, manufacturing, and healthcare. Furthermore, the discussion on scalability through distributed computing, edge computing, and incremental learning highlights the practical applicability of these methods for modern big data challenges.	
Is the title of the article suitable? **(If not please suggest an alternative title)**	The title is suitable and appropriately conveys the scope and focus of the manuscript. No changes are necessary.	
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.	The abstract is comprehensive and highlights the key aspects of the paper, including the problem addressed, techniques explored, and industries impacted. However, it could briefly mention the real-world case study to strengthen its practical emphasis.	
Is the manuscript scientifically, correct? Please write here.	The manuscript is scientifically robust and presents sound methodologies supported by relevant examples and case studies. The use of multiple algorithms and real-world applications enhances its credibility.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references are sufficient and fairly recent. However, including a few additional recent papers on Explainable AI (XAI) and its role in anomaly detection could strengthen the discussion on model interpretability.	
Is the language/English quality of the article suitable for scholarly communications?	The language quality is appropriate for scholarly communication. Some minor grammatical corrections and sentence restructuring could enhance readability.	
Optional/General comments	The manuscript could benefit from a clearer structure in certain sections, such as "Applications of Scalable Anomaly Detection Across Industries," where subsections for each industry could make it easier to navigate. Additionally, diagrams and illustrations, while helpful, could be better labeled and referenced in the text for improved clarity.	

PART 2:

	Reviewer's comment	Author's comment *(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)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

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