

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

PART 1: 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.	This manuscript meets the challenge of real-time anomaly detection in high-dimensional data, a great need in practice and many application areas. It also uses autoencoders, Isolation Forests, and PCA to present real-world applications in industries and adequately demonstrates scalability, distributed computing, edge computing, and incremental learning.
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.	The title is appropriate and in line with the manuscript's theme and the authors' expertise. No changes are required.
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.	The abstract provides a good summary of the key areas discussed in the text, including the problem solved, techniques used, and industries targeted. Also, it now includes a brief mention of a real-world case study, which enhances the practical focus of the work.
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.	The manuscript shows a high level of scientific accuracy with sound methods that have received good validation. Using several algorithms and real-world scenarios adds realism to both theory and analysis, making the methodology solid and practical, which adds considerable value for both theoretical and practical applications.
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.	The references are informative and relatively contemporary and support the manuscript. The incorporation of recent research on Explainable AI (XAI) and its usefulness in anomaly detection improves the discussion on model explainability.

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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.	The language used in the manuscript is quite formal and appropriate for academic work. It successfully transmits the research results. The minor changes made to its grammar and structure have improved its coherence, organization, and overall comprehensibility.
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.	The manuscript has been enhanced by restructuring the "Applications of Scalable Anomaly Detection Across Industries" section with industry-specific subsections. Diagrams are now more clearly integrated, labeled, and referenced, improving overall clarity and navigation for the reader.

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)	There are no ethical issues associated with this manuscript