

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	

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.	<ul style="list-style-type: none">➤ Advances Scalable Anomaly Detection: The manuscript explores cutting-edge machine learning techniques like Autoencoders, Isolation Forests, PCA, and RNNs, offering scalable solutions for real-time anomaly detection in high-dimensional data streams.➤ Practical Applications Across Industries: It highlights practical implementations in diverse fields such as finance, healthcare, manufacturing, and cybersecurity, bridging the gap between theoretical research and real-world applications.➤ Focus on Emerging Challenges: By addressing critical issues like model explainability, data privacy, and data quality, the manuscript fosters dialogue on overcoming barriers in applying machine learning to big data scenarios.➤ Promotes Efficient Data Processing: The discussion on distributed computing, edge computing, and incremental learning presents innovative approaches to managing large-scale, real-time data flows, contributing to more robust and efficient anomaly detection systems.	The paper focuses on the sensors' recent state-of-the-art machine learning approaches for large-scale anomaly detection, its real-world implementations and use cases across different industries, the issues of interpretability and data privacy, and new paradigms for big data processing in real-time systems.
Is the title of the article suitable? (If not please suggest an alternative title)	The title of the article, "Scalable Anomaly Detection with Machine Learning: Techniques for Managing High-Dimensional Data Streams," is clear, informative, and relevant to the content of the manuscript. However, if a more focused or engaging title is desired, here are some alternative suggestion. "Machine Learning for Scalable Anomaly Detection: Tackling Challenges in High-Dimensional Data Streams".	The title is appropriate and in line with the manuscript's theme and the authors' expertise.
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	YES The abstract provides a good summary of the key areas discussed in the text, including the problem solved, techniques used, and industries targeted.
Is the manuscript scientifically, correct? Please write here.	Yes	YES The manuscript shows a high level of scientific accuracy with sound methods that have received good validation.
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	References must be updated and it seems that authors need to refer to latest work to justify the current approach. Most of the references cited in the study are outdated.	New, recent references have been incorporated into the work to enhance a stronger focus.

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Is the language/English quality of the article suitable for scholarly communications?	Yes. The article demonstrates a solid foundation, offering valuable insights and thoroughly exploring the subject matter. Its detailed content reflects a commendable effort to comprehensively address the topic. With minor refinements in clarity, conciseness, and consistency, the article holds significant potential to meet scholarly communication standards and effectively engage its target academic audience.	The language used in the manuscript is quite formal and appropriate for academic work.
Optional/General comments	The article offers a well-researched and insightful discussion, demonstrating depth and dedication to the topic. To enhance its impact, incorporating additional real-world examples, refining transitions between sections, and clarifying definitions would be beneficial. These adjustments can improve coherence and ensure stronger engagement with academic readers.	The article is well thought out, well written, and well researched, showing great concern for the topic.

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