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| Journal Name: | [**Journal of Engineering Research and Reports**](https://journaljerr.com/index.php/JERR) |
| Manuscript Number: | **Ms\_JERR\_133345** |
| Title of the Manuscript: | **Enhanced Malware Detection in windows Application Using Ensemble Learning Technique** |
| Type of the Article | **Short communication** |

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| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | 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 research introduces a powerful malware detection system that uses AdaBoost and decision trees to deliver highly accurate results, outperforming many traditional methods. * By combining static and behavioral analysis, the study shows how machine learning can effectively classify different malware families and adapt to evolving threats. * The model’s strong performance in real-world scenarios highlights its potential for use in practical cybersecurity systems. * Overall, this work provides useful guidance for researchers and cybersecurity professionals aiming to build smarter, more reliable malware detection tools. | By combining static and behavioral analysis, the study shows how machine learning can effectively classify different malware families and adapt to evolving cyber threats.  The model's strong performance in real-world scenarios highlights its potential for deployment in practical cybersecurity applications.  To sum up, this work serves as a valuable guide for researchers and cybersecurity professionals looking to develop more dependable and adaptive malware detection systems. |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | The current title, "**Enhanced Malware Detection in Windows Application Using Ensemble Learning Technique**," is informative but could be refined for clarity and impact. It could benefit from slight grammatical improvements and more specific wording. Here's a suggested alternative:  **“Enhanced Malware Detection in Windows Applications Using Ensemble Learning Techniques”** | Yes, I updated it |
| 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. | **Summary of Suggestions for Improving the Abstract: -**   * Clarify the objective by clearly stating what was done, how, and with what results. * Include key results such as accuracy or performance metrics to show effectiveness. * Refine language to be concise and formal; avoid redundant or overly casual phrases. * Streamline structure by condensing repeated ideas and following a clear flow: background → method → results → impact. | I agree. To increase readability, eliminate repetition, and guarantee a coherent flow, the abstract has been updated. Improvements have been made in the following areas: Clarification of the Objective: The abstract now makes it clear what was done, how it was done, and the outcomes. Performance Metrics: Important outcomes have been specifically mentioned, including F1-score, recall, accuracy, and precision. Concise and Formal Tone: To ensure a more accurate and academic tone, redundant phrases have been eliminated. The abstract now has a clear structure, with the following logical flow: Background → Method → Results → Impact. |
| Is the manuscript scientifically, correct? Please write here. | **Yes**, the manuscript is scientifically correct, but refining technical depth and result interpretation would enhance its credibility and impact. | The manuscript is accurate from a scientific standpoint. However, the following improvements have been made to increase its impact and credibility: Technical Depth: To support AdaBoost's superiority over other ensemble techniques like Gradient Boosting and XGBoost, the methodology section has been extended. Interpretation of the Results: A more thorough examination of performance indicators, taking into account constraints and potential enhancements, has been integrated. |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | **Yes**, the references are mostly recent and sufficient. However, more focus on AdaBoost and ensemble learning in malware detection is suggested. Adding 2–3 recent studies on ensemble methods would strengthen the manuscript. | The majority of the references are current and adequate. To improve the literature review, more research on AdaBoost and ensemble learning in malware detection has been added in response to the reviewer's recommendation. Recent developments in ensemble methods for malware classification are highlighted by the addition of new references. |
| Is the language/English quality of the article suitable for scholarly communications? | The language of the article needs improvement for scholarly communication. There are issues with grammar, capitalization, and sentence structure. The tone should be more formal and concise, with technical clarity. Editing for consistency and professionalism is recommended to meet academic standards. | I agree. To satisfy academic writing standards, the manuscript needed to be improved in terms of grammar, capitalization, and sentence structure. The following improvements have been made: Grammar and Style Corrections: Problems with word choice, sentence construction, and typos have been fixed. Formal and Concise Tone: Superfluous statements and informal language have been removed from the text. Consistency and Technical Clarity: To make the manuscript easier to read, terms and definitions are now used consistently throughout. |
| Optional/General comments | Relevant topic with good results. Needs better language and structure. Minor edits can improve clarity and impact. |  |

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| **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)* | No |