Review of: "Generative Artificial Intelligence Using Machine Learning on Wireless Ad Hoc Networks"

Dr.Reshma V.K[1]

1 Sri Krishna College of Engineering and Technology

Potential competing interests: No potential competing interests to declare.

Based on my review of the paper titled "Generative Artificial Intelligence Using Machine Learning on Wireless Ad Hoc Networks" by Antonio Cortés Castillo, here are some comments and suggestions for improvement:

General Comments

Clarity and Structure: The paper is generally well-structured, with a clear abstract, introduction, methodology, experimentation, discussion, and conclusion sections. However, some sections, particularly the methodology and experimentation, could benefit from clearer explanations and more concise language.

Technical Depth: The paper demonstrates a good understanding of the application of Generative Artificial Intelligence (GenAI) and Machine Learning (ML) in the context of wireless ad hoc networks. The use of Multilayer Perceptron (MLP) and Radial Basis Function (RBF) neural networks is well-justified.

Figures and Tables: The inclusion of figures and tables to illustrate the experimental setup and results is very helpful. However, some figures could be labeled more clearly, and the captions could provide more context.

Detailed Comments

Abstract:

- The abstract is comprehensive but could be more concise. Consider summarizing the key findings and contributions in a more succinct manner.

Introduction:

- The introduction sets the stage well but could benefit from a more explicit statement of the research problem and objectives.
- Consider adding more background information on GenAI and its relevance to wireless networks.

Related Work:

- The related work section is thorough. However, it could be more critical, highlighting the gaps in existing research that

your work addresses.

Materials and Methods:

- The methodology section is detailed but somewhat dense. Breaking it into smaller subsections with clear headings could improve readability.
- The explanation of metric selection and extraction is somewhat confusing. Simplifying the language or adding a step-by-step example might help.

Experimentation:

- The experimental setup is well-documented, but the rationale behind certain choices (e.g., number of hidden layers and units) could be explained more clearly.
- The results are presented clearly, but additional discussion on the implications of the findings would be beneficial.

Discussion:

- The discussion section effectively interprets the results. However, it would be stronger if it included a comparison with the results of related studies mentioned earlier in the paper.
- Consider discussing the potential limitations of your approach and possible areas for future research.

Conclusion:

- The conclusion summarizes the findings well but could reiterate the significance of the study and its contributions to the field.
- Including a brief discussion on practical applications or implications of your findings would add value.

References:

- Ensure that all references are current and relevant. Some older references might be replaced with more recent studies to reflect the latest advancements in the field.

Stylistic Suggestions

- **Language and Tone**: Ensure that the language is formal and technical throughout. Avoid colloquial expressions and ensure consistency in terminology.
- **Grammar and Syntax**: Proofread the document for any grammatical errors. Ensuring clarity and readability is crucial for a technical paper.

Additional Considerations

- **Software and Tools**: If specific software or tools were used for data analysis and experimentation, mention them explicitly, including their versions.

- **Reproducibility**: Consider providing additional details or supplementary material that would allow other researchers to reproduce your experiments.

Overall, this paper presents a significant contribution to the field of wireless ad hoc networks using GenAI and ML. With some refinements in clarity, structure, and depth of discussion, it has the potential to be a valuable resource for researchers and practitioners in this area.