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

Ryhan Uddin[1]

1 Cleveland State University

Potential competing interests: No potential competing interests to declare.

The paper explores the applications of generative AI and the use of Multilayer Perceptron (MLP) and the Radial Basis Function (RBF) to improve the performance of wireless ad-hoc network infrastructure. The approach is significantly novel and warrants further research in the field.

Strengths:

1. The concept is novel and timely. The authors have done a commendable job in elaborating on the application of generative AI and ML in enhancing ad-hoc network performance.
2. The paper details the neural network structure and the rationale behind its construction effectively.

Weaknesses:

1. The images could benefit from improved visual clarity, as some of the fonts are too small to read comfortably.
2. The paper lacks details regarding the simulation environment and how the dataset was extracted. Including more technical details would enhance the experimental fidelity.
3. The paper would greatly benefit from comparisons with previous works in similar fields.

Suggestions:

1. The writing could be clearer. Readers need to focus on the topic, which can be hindered by the overuse of long and complex sentences. (Example: The second paragraph of the introduction could be revised for better clarity.)
2. There are some minor typos. Example: “Create a model of the ..... which will be represented through Generative Neural Networks visualized through MPL and RBF processes, respectively.” The abbreviation should be MLP, not MPL.
3. The related work section would benefit from more critical reasoning and a clearer emphasis on the gaps in existing research.
4. Providing more details on the simulation environment is crucial for enhancing the manuscript.

Overall, the authors have done an excellent job in highlighting their work in the field of wireless ad-hoc networks and the application of generative AI and MLP. With some minor revisions, this paper could become a valuable resource for future researchers working in similar domains.