

REVIEWER'S REPORT

Manuscript No.: 51835

Date: 26-05-2025

Title: **ARTIFICIAL INTELLIGENCE AND CYBERSECURITY: THE CONTRIBUTION OF GPT AND BERT IN THREAT DETECTION AND INCIDENT ANALYSIS**

Recommendation:

Accept as it is
 Accept after minor revision..... **YES**
 Accept after major revision
 Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality			YES	
Techn. Quality			YES	
Clarity			YES	
Significance		YES		

Reviewer Name: Gulnawaz Gani

Reviewer's Comment for Publication.

Detailed Reviewer's Report

- This paper presents an innovative approach combining BERT for threat classification and GPT for alert generation and recommendations, achieving high accuracy (97.2%) and a low false positive rate (2.1%).
- While the results are promising, the paper could elaborate more on the specific challenges encountered during the integration of BERT and GPT, especially regarding potential inconsistencies or misinterpretations between the two models.
- A deeper analysis of the "hallucination rate" of GPT and strategies to mitigate it beyond human validation would also be beneficial.
- Additionally, the generalizability of the findings, given the sole reliance on the CIC-IDS2017 dataset, could be further discussed.
- The paper has some issues:
 - See the section "Mathematical Approach". The math has not rendered. Look into this issue.
 - Also, improve the number of references.