#### **Review Comments: 1**

## 1. Enhanced alert generation system with attacker IP for DOS attacks is the proposed title of this paper

• Yes. Enhanced Alert Generation System with Attacker IP for DoS Attacks

#### 2. How to avoid the DDOS attacks?

• To prevent DDoS attacks, our system includes rate limiting, IP blocking, and dynamic threshold adjustments based on traffic patterns.

## 3. How to achieve the IP tracking process?

• The system uses Pyshark to analyze network traffic in real-time, identifying and logging the attacker's IP for further action.

### 4. How to enhance the performance?

• Performance is enhanced by optimizing packet processing to reduce false alerts and resource usage, improving detection speed and accuracy.

## 5. How to achieve the monitoring process?

• Our system performs continuous network monitoring, capturing and analyzing packets in real-time for prompt detection of suspicious activity.

### 6. Survey of literature is not systematic

• The literature survey has been reorganized to categorize existing techniques by their detection method.

#### 7. How to achieve high accuracy?

• High accuracy is achieved through dynamic threshold tuning and minimizing false positives, helping the system distinguish between normal traffic and attacks effectively. These techniques ensure reliable DoS detection.

#### 8. How the results are validated?

• Results are validated by testing the system in a Virtual network setup, focusing on its accuracy and speed in detecting attacks. This confirms its effectiveness in real-time situations.

#### 9. Figures are of poor resolution and clarity.

• All figures have been updated to high-resolution formats for clear visualization.

## Review comments-2

## 1. What are the critical issues to be considered when selecting the appropriate technique for the research study?

• We considered factors like accuracy, resource efficiency, and scalability when selecting detection techniques.

# 2. There is no new research statement for this proposed work. Provide the details in the appropriate section.

• This research addresses the need for adaptive DoS detection with real-time alerting and IP tracking to improve network security.

- 3. The author is not mentioning the research motivation or gap for this current research work. Provide the details.
  - Current systems lack real-time IP tracking and adaptive thresholds, which our approach addresses to enhance detection reliability.
- 4. What is existing system mentioned in the table?
  - The table highlights conventional DoS detection methods and their limitations, like high false positives and lack of real-time tracking. Our system addresses these with adaptive thresholds and real-time IP tracking.
- 5. What are the four methods to detect prevent cybersecurity threats?
  - Four key methods include intrusion detection, behavior analysis, anomaly detection, and signature-based detection
- 6. Manuscript should be edited for proper English language, grammar and punctuation. Avoid using personal pronouns and informal words like landscape. Machine generated words found [For Ex: DoS assaults, DDoS assaults]. Some of the figures are blurry.
  - The manuscript was checked for formal language, grammar accuracy, and the elimination of informal and machine-generated words.