IEEE Research Paper — Cyber Threat Detection Using Machine Learning

Abstract— This paper presents a lightweight intrusion detection system using machine learning and visual analytics.

I. Introduction

Machine learning improves cyberattack detection in modern networks.

II. Methodology

Random Forest, Isolation Forest, preprocessing, visualization.

III. Results

Accurate detection and meaningful visual outputs.

IV. Conclusion

ML-based IDS improves threat visibility.

References
[1] CICIDS2017 Dataset
[2] Scikit-learn Documentation