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A Machine Learning Framework for Intrusion Detection

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Abstract: In an increasingly interconnected world, securing environments against intrusions is paramount. This paper presents a novel Machine Learning Framework for Intrusion Detection in Environments. Leveraging curated datasets, we employ data preprocessing and feature engineering techniques to enhance data quality and relevance. Our framework employs a suite of machine learning algorithms for accurate intrusion detection. Experimental results demonstrate superior performance compared to baseline methods, achieving high accuracy, precision, and recall. This research advances security, offering a robust solution to safeguard ecosystems

Keywords: Intrusion detection, machine learning, data preprocessing, feature engineering

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