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Cyber Threat Detection in Supply Chains Using XGBoost

Mr. S. Venu Gopal, K. Indu, T. Jagadish Kumar, S. Shalem Raj
Assistant Professor, Information Technology
Students, Information Technology
ACE Engineering College, Hyderabad, India
kavidaindu9243@gmail.com

Abstract: *In the digital era, ensuring the security and resilience of supply chains is critical due to the growing complexity and volume of cyber threats. This project proposes a Cyber Threat Detection System that leverages advanced machine learning techniques, specifically the XGBoost algorithm, to enhance threat identification and risk management within digital supply chains. The system processes and analyzes data from diverse cybersecurity sources such as IDS, SIEM, and TIPs to detect phishing, malware, and DoS attacks. A secure Flask-based web interface allows users to upload data, receive predictions, and monitor threats in real-time.*

Keywords: Cybersecurity, XGBoost, Machine Learning, Supply Chain, Threat Detection

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