# *ABSTRACT*

*The rapid advancement of information technology has encouraged various organizations to utilize information systems to enhance operational efficiency. However, the use of such systems also presents challenges in terms of data security. To identify and mitigate potential vulnerabilities in information systems, an internship was conducted at CyberArmyID as a Backend Developer. The internship focused on developing an automated scanner system capable of detecting web security vulnerabilities. The development process involved system design, backend implementation using Python, and testing on several vulnerable target applications. The system was specifically designed to detect SQL Injection vulnerabilities in MySQL databases, particularly the time-based SQL Injection technique, which leverages response delays as indicators of successful injection. The system demonstrated adequate accuracy in identifying such exploits. The outcomes of this project are expected to assist security teams in detecting and handling vulnerabilities more efficiently and serve as a foundation for developing more comprehensive security systems in the future.*

***Keywords**: Web Security, Automated Scanner, SQL Injection, MySQL, Time-Based, Backend Developer*