

Title : Automated Vulnerability Detection Program

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Type of presentation* (choose 1) : Oral Presentation
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ABSTRACT

This independent study presents an Automated Vulnerability Detection Program, which was developed to assist in the automated assessment and detection of security vulnerabilities in networks and websites. The program integrates three primary security tools: Nmap, Nikto, and OWASP ZAP. Nmap scans open ports and services in a network, Nikto identifies known vulnerabilities in web servers, and OWASP ZAP assesses web application security. Examples of vulnerabilities that can be detected include open ports, OS detection, SQL Injection, and Authentication Bypass. The program is easy to use, requiring only the input of the desired vulnerability category, helping non-expert users better understand and mitigate cybersecurity risks. However, the program still requires improvements in performance, accuracy, and broader vulnerability coverage before it can be effectively deployed in real-world scenarios.

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