Nikhil Yadav

Cyber Security Analyst | +13143266750 | nikhil.yadav@slu.edu | LinkedIn | Portfolio

EDUCATION:

Saint Louis University

Master's degree | Master's, Cyber Security | GPA: 3.88

May 2025

WORK EXPERIENCE:

TECHTWINS TECHNOLOGY

Jaipur, India

Cyber Security Analyst Intern

April 2022 – July 2022

- Conducted vulnerability assessments and penetration testing using Metasploit, Nmap, and Nessus, identifying and mitigating CVE vulnerabilities such as CVE-2020-0796 and CVE-2021-34527, reducing security risks by 40%.
- Performed Wireshark-based network traffic analysis to detect anomalies, improving incident response effectiveness and system security by 30%.
- Developed an automated security compliance tracking system in Google Sheets to streamline risk assessment and reporting, improving efficiency by 25%.
- Implemented privilege escalation techniques and secure remote access protocols on Windows Server 2006, 2019, and Active Directory, enhancing system security.
- Designed a Power BI dashboard for real-time vulnerability tracking, enabling proactive monitoring of security posture.
- Delivered technical reports and security findings to cross-functional teams and non-technical stakeholders, driving discussions on regulatory compliance and security best practices.

PROJECTS:

Autonomous Vehicle Cybersecurity Project - Present

- Developed an automated compliance monitoring tool to detect unauthorized access and improve vendor security assessments in vehicle systems.
- Performed penetration testing on third-party communication protocols using Burp Suite and Metasploit to identify supply chain vulnerabilities.
- Integrated Splunk for real-time security logging and analysis, improving threat detection capabilities.
- Assessed risk analysis and compliance tracking using ServiceNow and Google Sheets to enhance regulatory compliance with ISO 21434 and GDPR.

Wi-Fi Security & Penetration Testing Tool - Present

- Designed a custom cybersecurity tool for Wi-Fi network analysis and penetration testing, utilizing Aircrack-ng, Nmap, and Wireshark.
- Captured and analyzed 4-way handshake traffic to identify weak encryption protocols and simulate real-world third-party security breaches.
- Integrated automated reporting features with Microsoft Excel & Power BI, enabling network risk assessment visualization.

GUI Packet Sniffer - 2024

- Developed a Python-based GUI tool for packet sniffing and network monitoring, capturing over 10,000 network packets and improving data analysis efficiency by 40%.
- Implemented Nmap-based scanning features for real-time network mapping and anomaly detection.
- Reduced troubleshooting time by 30% through advanced packet filtering and analysis similar to Wireshark.

Image Steganography Tool - 2024

- Achieved a 98% success rate in encoding and retrieving hidden messages, validated through testing on 1,000+ images, ensuring robust and reliable data concealment.
- Enhanced user accessibility by integrating both CLI and GUI interfaces, boosting user adoption by 50%.
- Documented the project's methodology and presented the findings to peers and mentors, showcasing clear communication and technical writing proficiency.

Password Cracker - 2024

- Achieved a 95% success rate in cracking passwords using SHA-256 hash-based dictionary attacks, processing each password in under 2 seconds on average.
- Improved recovery efficiency by 25% compared to baseline tools through performance optimization.

Cyber Security Audit & Live Assessment - 2023

- Conducted a 7-day live cybersecurity audit across multiple locations, assessing critical systems and internal security controls. Led a 3-day training program, equipping teams with Lansweeper, Pcaudit, and web hacking techniques, resulting in a 20% reduction in system vulnerabilities.
- Collaborated with the Chief Security Analyst, gaining hands-on experience in risk assessment, penetration testing, and compliance auditing.
- Evaluated and strengthened the security posture of examination systems, ensuring data integrity and regulatory compliance.
- Analyzed security gaps, proposed mitigation strategies, and enhanced auditing expertise by tackling real-world cybersecurity challenges.

Keylogger Program - 2023

- Logged and transmitted 1,000+ keystroke sequences during testing, demonstrating the program's accuracy and reliability.
- Reduced user setup time by 20% with streamlined email reporting integration and stealth functionalities.

CERTIFICATIONS:

- Website Hacking Techniques
- EC-Council Ethical Hacking Essentials
- EC-Council Digital Forensics Essentials
- EC-Council Network Defense Essentials
- Microsoft Az-900
- Wireshark
- Modern Web Application Hacking
- AWS Educate Getting Started with Networking
- AWS Educate Introduction to Cloud 101
- JavaScript and ReactJs
- Python and Deep Learning

SKILLS:

Cyber Security:

- Metasploit
- Nmap
- Burp Suite
- Nessus
- Wireshark
- Splunk
- PfSense
- Aircrack-ng
- SDR
- (Software-defined Radio)
- Radio Frequency (RF)
- Bluetooth and RFID hacking
- Social Engineering
- SQLmap

Security Skills:

- Vulnerability Assessment
- Penetration testing
- Incident Response and Protocols
- Data Administration
- Incident Response and Mitigation
- Cloud Security
- Network Security
- Digital Investigation
- Intrusion Detection and Analysis
- Cyber threat and Defense
- OWSAP
- John the Ripper and Hashcat
- MITM Attack Framework
- Autopsy, FTK Imager

Programming Skills:

- Python
- Java
- PHP
- SOL
- JavaScript
- Scripting