# PAVAN PAVITHRAN

+971 52 760 7194 | pavanpavithran44@gmail.com | UAE | www.linkedin.com/in/pavan-pavithran

#### SUMMARY

Dedicated and detail-oriented cybersecurity enthusiast with a strong academic foundation in Engineering Physics from the University of Illinois Urbana-Champaign. Possesses hands-on experience in vulnerability assessment, penetration testing, and secure software development. Proven ability to identify and mitigate security risks using industry-standard tools such as Burp Suite, Metasploit, and Nmap. Holds multiple certifications including CEHv13 and CompTIA Security+, with a consistent track record of academic and professional achievement. Actively ranked in top cybersecurity CTF platforms, demonstrating strong problem-solving and offensive security skills.

## **SKILLS**

VAPT tools: Nmap, BurpSuite, Metasploit, OWASP ZAP, hydra, SQLmap | Networking: TCP/IP, DNS, VPNs, Firewall, Proxies | Operating Systems: Kali Linux, MacOS, Windows | Languages: Bash, Python, C++, Java, HTML, Qiskit | Security standards: OWASP top 10, MITRE ATT&CK, CVSS |

## **CERTIFICATIONS**

CompTIA Security+ Sy0-701

EC-Council CEHv13

Advanced Penetration Tester (RedTeam Hacker Academy)

#### **EDUCATION**

University of Illinois Urbana Champaign | Bachelor of Science Engineering Physics

2021 - 2025

• Additional electives completed for computational physics track.

#### PROFESSIONAL EXPERIENCE

#### CYBERSECURITY INTERN | RedTeam, Dubai

May 2025 - present

- Conducted vulnerability assessments and penetration testing for client networks, web applications, and internal systems.
- Identified security flaws like SQL injection (SQLi), Cross-Site Scripting (XSS), and broken authentication vulnerabilities.
- Used tools like Burp Suite, OWASP ZAP, and Metasploit to discover and exploit vulnerabilities.
- Performed internal network penetration testing using Nmap and Nikto to evaluate network security.
- Wrote clear, concise vulnerability assessment reports with findings, risk assessments, and remediation strategies.
- Collaborated with IT teams to prioritize and resolve security issues in a timely manner.
- Assisted in setting up automated vulnerability scans using Nessus and OpenVAS.

## **SDE INTERN** | University of Illinois Urbana Champaign

May 2024 - Aug 2024

- Aided with developing a feature in Java which enabled pausing and resuming exposure contract insertions, updates, and deletions
  within an Exposure Manager.
- Introduced a REST API in Spring Boot to filter and showcase exposure adjustments on the Exposure Adjustment window for
  user convenience
- Implemented clean coding practices by engaging in code reviews and maintaining code coverage exceeding 90%.

## **TEACHING ASSISTANT** | University of Illinois Urbana Champaign

May 2021 – Dec 2021

- Teaching Assistant for course LAS100.
- Collaborated with peers to develop and implement programs for introduction course LAS100 with the help of professors.
- Provided guidance and leadership to incoming international first-year students.
- Facilitated group meetings and discussions to address important topics related to cultural adaptation and academic success.
- Met deadlines to evaluate and grade students' assignments.

## **PROJECTS**

## VAPT ON E-COMMERCE APPLICATION

- Conducted a penetration test of a sample e-commerce website to identify vulnerabilities.
- Discovered XSS and SQL injection vulnerabilities using Burp Suite and SQLmap.
- Created a detailed report with risk analysis and suggested remediation steps.

#### **CTF CHALLENGES**

- Participated in various CTF platforms like TryHackMe and Hack The Box.
- Solved challenges related to web exploitation, buffer overflows, and privilege escalation.
- Improved problem-solving and penetration testing skills through hands-on exercises.
- Ranked top 5 in TryHackMe Monthly leaderboard for May 2025.

## **RESEARCH PROJECT**

- Collaborated with a team of students with the help of a professor to develop a model to detect and count the number of Western Corn Rootworm Beetles in corn fields in mid-western United States.
- Utilized an Arduino microcontroller with a camera module and a YOLOv5 deep learning model.