SHANTANU VARTAK

shantanuvartak09@gmail.com | linkedin.com/in/shantanuvartak | shantanuvartak.vercel.app

SUMMARY

Cybersecurity graduate student with hands-on experience in security engineering, vulnerability assessment, penetration testing, and secure application development. Proficient in Python, C, C++, Java, and PowerShell scripting, as well as security tools including Wireshark, Nmap, Metasploit, and Burp Suite. Skilled in network security, cryptography, access-control systems, security architecture, and risk mitigation. Passionate about developing and implementing security controls, defenses, and countermeasures to protect data and systems.

EDUCATION

University Of Washington, Bothell, WA, US — *Sept' 2025 – May' 2027*
Master of Science (MS) | Cyber Security Engineering | Incoming
Relevant Coursework: Cryptography, Information Assurance and Cyber Security

Vellore Institute Of Technology, Bengaluru, KA, IN — *Jul' 2024 – Jun' 2025*
Post-Graduate Program (PGP) | Cyber Security Specialization | GPA: **4/4**
Relevant Coursework: Cryptography, Cloud Security, Database Management Systems, Python

Symbiosis Skills And Professional University, Pune, MH, IN — *Aug' 2020 – Jun' 2024*
Bachelor of Technology (B.Tech.) CS/IT | Cyber Security Specialization | GPA: **3.5/4**
Relevant Coursework: Physical Security, Digital Forensic, Malware Analysis, OSINT, Identity and Access Management

EXPERIENCE

Suma Soft Private Limited, Pune, Maharashtra, IN | **Security Analyst Intern** — *Jun' 2023 – Dec' 2023*
- Reduced security risks by 70% through end-to-end Vulnerability Assessment and Penetration Testing (VAPT) on enterprise systems.
- Improved system resilience by 50% by identifying and mitigating OWASP Top 10 listed vulnerabilities using Burp Suite, Nmap, Metasploit, and Wireshark.
- Produced detailed security assessment reports with actionable risk mitigation strategies, ensuring 100% compliance with ISO 27001 security controls.

Invasystems Incorporated, Pune, Maharashtra, IN | **Android Application Development Intern** — *Jun' 2022 – Jul' 2022*
- Implemented Role-Based Access Control (RBAC) for 100+ users in a Java–Node.js–MySQL ticketing system.
- Strengthened application security by 60% through input validation, secure data flow, and encryption mechanisms.
- Applied defense-in-depth architecture and real-time session tracking to prevent unauthorized access.

Ernst & Young, Remote, IN | **Cyber Security Intern** — *Aug' 2021 – Sep' 2021*
- Conducted risk and compliance gap analysis aligning client systems with ISO 27001 and NIST SP 800-53 security frameworks.
- Collaborated with cross-functional teams to enhance governance policies, improving compliance by 40%.
- Delivered incident reports with detailed root cause analysis and remediation plans.

PROJECTS

Web-Exploit Toolkit | *Webapp Vulnerability Scanner* | GitHub — *Aug' 2025*
- Crafted a modular Python CLI tool to automate detection of XSS, SQLi, HTMLi, CSRF, Open Redirect and Directory Traversal web vulnerabilities with GET/POST injection and support for authenticated scans.
- Integrated curated payloads to maximize detection accuracy, reducing manual testing effort and time by 50% in assessments.

Donate Now | *Blockchain-based Secure Donation Platform* | GitHub — *Feb' 2025*
- Developed a secure Ethereum smart contract donation platform ensuring transaction traceability and cryptographic integrity.
- Integrated JWT-based authentication, API protection, and secure coding practices to reduce unauthorized access by 60%.

DeCap (Decentralized Capital) | *Semi-decentralized FinTech WebApp* | GitHub — *Nov' 2024*
- Secured financial transactions using Solidity smart contract audits and a protected Node.js backend.
- Enhanced user trust by implementing hashed credentials, secure HTTP headers, and strict access control policies.

SKILLS

Security Engineering
Network Security, Application Security, API Security, Access Control, Cryptography, Risk Assessment, Penetration Testing

Programming/Scripting
Python, Java, C, C++, Solidity, SQL, PowerShell, JavaScript

Security Tools
Wireshark, Burp Suite, Metasploit, Nmap, Nessus, Hashcat, AWS EC2/S3/Lambda

CERTIFICATIONS

Jr. Penetration Tester | Tryhackme | Credential Link — *Jul' 2025*