Pratham Verma

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PROFESSIONAL SUMMARY

Security Analyst with hands-on experience gained through internships and individual projects, focusing on web application security, API testing, and cloud vulnerability assessments. Identified and mitigated 80%+ of critical vulnerabilities during real-world penetration tests. Built an AI-powered Web Application Firewall with a 97% detection rate and an ECDSA-based digital signature system that reduced unauthorized access risks by 75%. Reduced vulnerability exposure by up to 80% using tools like Burp Suite, Nmap, and Nikto. Strengthening security through actionable reporting and focused remediation.

EXPERIENCE

Security Analyst Intern | SQBGN SafeYourWeb Infosec Pvt. Ltd.

March 2025 - Present

- Conducted penetration testing on 3+ web applications, identifying and mitigating over 80% of critical vulnerabilities, reducing the attack surface and enhancing overall security posture.
- Remediated vulnerabilities including CVE-2022-22719, CVE-2011-3389, CVE-2018-1000888, and CWE-614 and so on.
- Conducted API security testing for based on OWASP API Top 10, proposing and implementing mitigation strategies that enhance security resilience by 60%.
- Performed comprehensive cloud security assessments on AWS, implementing IAM policies, encryption protocols, and identifying misconfigurations, reducing exposure to potential threats by 40%.
- Authored detailed security reports, providing actionable insights that remediate timelines by 30%.

Security Intern | Senselearner Technologies Pvt. Ltd.

September 2023 - October 2023

- Executed manual and automated penetration tests across web environments using industry-standard methodologies.
- Identified and mitigated vulnerabilities, reducing overall attack surface by 30%.
- Leveraged tools like Burp Suite and Nikto to improve the security posture by 60%.

PROJECTS

Web Application Firewall | Video: YouTube, Code: GitHub

May 2024

- Built a data pipeline using Burp Suite and OWASP ZAP to classify web traffic for training an ML-based WAF.
- Designed and deployed a proxy-based WAF using ML techniques, achieving a 97% malicious request detection rate.
- Improved application layer security by intercepting and classifying incoming traffic in real-time.

Blockchain Based Medical Records Portal | Live: Link, Code: GitHub

June 2024

- Developed a blockchain-based healthcare system using Ethereum to enable tamper-proof patient data storage.
- Integrated smart contracts for secure patient data storage and access control, improving data integrity by 60%.
- Leveraged Hardhat for comprehensive smart contract testing and deployment, reducing potential vulnerabilities by 70%.

Digital Signature Verification | Live: Link, Code: GitHub

November 2024

- Implemented ECDSA using Elliptic Curve Cryptography for secure digital signatures.
- Enhanced data privacy, reducing risk of unauthorized access by 75%.
- Designed an optimized key generation and storage mechanism to streamline cryptographic operations.

TECHNICAL SKILLS

Programming Languages & Databases: Python 3.13, Java 8, MySQL, PostgreSQL

Cybersecurity: Web Application Security, OWASP Top 10, VAPT, Penetration Testing, Secure Coding Practices

Tools: Kali Linux 2025.1a, GitHub, Vercel, Burp Suite, Nmap, Nikto, Wireshark, gobuster, OWASP ZAP

CERTIFICATIONS

Google Certified Cybersecurity Professional | Google, Coursera: Link

Network Support and Security | CISCO: Link

EDUCATIONS

 $\begin{array}{l} \textbf{Galgotias University} \mid \texttt{Bachelor of Technology in Computer Science} \\ \textbf{- CGPA: 8.2/10.0} \end{array}$

June 2022 - June 2026

ACHIEVEMENTS

Public Speaker – GDG New Delhi Devfest 2k24: Delivered sessions on "AI-Powered Cybersecurity: Strengthening Defense with Machine Learning" to 200+ attendees, contributing to a 35% increase in event participation and engagement.

Writeups – Medium | Link: Authored 20+ in-depth technical blogs on web security, vulnerability exploitation, and ethical hacking, reaching over 10,000 industry professionals and increasing awareness of security best practices.

Cybersecurity Content Creator – Instagram | Link: Documented journey in cybersecurity through 40+ educational posts, covering topics like cyber security, ethical hacking and personal project insights. This consistent sharing improved engagement by 2x and fostered meaningful networks.

Hackathon Finalist – Dexterix 4.0: Led a 5-member team to the Top 4 out of 100+ teams, creating an AI-powered health platform that boosted user engagement by 40%, with personalized health recommendations increasing platform usage by 30%.

CTF Participant - CyberKnight: Ranked 56th out of 200 participants in a national Capture the Flag competition.