Mansi Singh

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Education

VIT Bhopal University, Madhya Pradesh, B.Tech in Computer Science and Engineering   2022 - 2026
- CGPA: 8.20

Skills

Technical Skills: Java (DSA), C++, SQL, HTML, CSS, JavaScript
Software Tools: Excel, Google Sheets, Autopsy, Maltego, Wireshark, Burp Suite

Projects

Pictoshield
- Developed a **secure graphical password authentication system** to replace traditional text-based passwords, reducing vulnerability to brute-force and dictionary attacks.
- Implemented **SHA-256 hashing with salted hashing** (bcrypt) for stored credentials and **JWT-based session management** to prevent session hijacking.
- Integrated rate-limiting and CAPTCHA to detect automated attacks.
- **Tech Stack**: HTML/CSS, JavaScript (React.js), PHP (Laravel for backend), Python (for security auditing scripts).

Aerogriff
- Built a **web-based dashboard to monitor real-time drone-captured data** with role-based access control (RBAC) for farmers.
- Secured drone-to-server communication using **MQTT with TLS/SSL encryption** and certificate pinning to prevent MITM attacks.
- Deployed on AWS/GCP with load balancing (ALB) and auto-scaling groups, ensuring 99.9% uptime during peak farming seasons.
- **Tech Stack**: MQTT with TLS/SSL (secure communication), and Burp Suite (penetration testing).

Experience

Codec Technologies, Mumbai   May 2025 - June 2025
- As a Cyber Security Intern, I explored ethical hacking, web app security (OWASP Top 10), and threat intelligence.
- Practiced **cloud security and encryption techniques**, while participating in incident response drills.

Elevate Labs, Bengaluru   June 2025 - present
- As a Cyber Security Intern, I Performed security scans (Nmap, OpenVAS) and mitigated vulnerabilities by patching systems and configuring firewalls.
- Implemented security measures including **firewall rules, traffic analysis (Wireshark)**, and browser audits to harden systems.

Achievements and Extra-curricular

- Engaged in **100 Days of Code** by discussing DSA concepts and optimization techniques, enhancing problem-solving discussions within the coding community.
- Maintained a **600+ day streak on TryHackMe and Let's Defend**, consistently solving security challenges to sharpen offensive and defensive cybersecurity skills.
- Completed multiple **industry-aligned software engineering job simulations on Forage**, gaining hands-on experience in real-world development workflows and best practices.
- Practiced cybersecurity concepts through **Capture The Flag (CTF)** challenges on platforms like picoCTF, Hack The Box, and TryHackMe, enhancing skills in penetration testing, reverse engineering, and vulnerability exploitation.
- **Extra-curricular:** Content team lead at iOS Club and Non-Tech domain lead at Cyber Warriors Club.

Coding Profiles

- Leetcode , HackerRank