

Pratham Verma

+91 7065616557 | contactme.pratham@gmail.com | [Portfolio](#) | [Linkedin](#) | [Github](#)

SKILLS SUMMARY

- **Technical Skills:** Python, Java, C++, Data Structures & Algorithms, MySQL, PostgreSQL.
- **Security:** Web Application Security, OWASP Top 10, Penetration Testing, Secure Coding Practice.
- **Networking:** Computer Networking, Network Traffic Analysis.
- **Tools & Platforms:** Linux OS, Vercel, GitHub, Burp Suite, Nmap, Wireshark, gobuster, OWASP ZAP.

PROJECTS

- Web Application Firewall** (Video: [Link](#), Code: [Link](#)) **March 2024- May 2024**
- Designed a web application firewall (WAF) using Machine Learning, reducing malicious requests by 97%.
 - Engineered a data collection pipeline utilizing Burp Suite and OWASP ZAP to categorize web traffic, directly enhancing machine learning model accuracy by 15%.
 - Implemented a Proxy Server achieving a 97% detection rate of malicious activities.
- Digital Signature Verification** (Live: [Link](#), Code: [Link](#)) **September 2024- November 2024**
- Developed and implemented ECDSA-based digital signatures leveraging ECC to enhance security with smaller key sizes.
 - Strengthened data privacy with ECDSA, lowering unauthorized access risk by 75%.
 - Built an optimized key generation and storage mechanism, simplifying cryptographic operations by 60%.
- Blockchain Based Medical Records Portal** (Live: [Link](#), Code: [Link](#)) **June 2024- August 2024**
- Developed a blockchain-based healthcare system using Ethereum and Solidity, patients with tamper-proof 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%.
- Server-Client Based Chat Application** (Code: [Link](#)) **November 2023- December 2023**
- Engineered a real-time communication system using socket programming, ensuring reliable message transmission over a network with 99.9% uptime.
 - Built an intuitive GUI using Java Swing, enhancing usability and accessibility.

WORK EXPERIENCE

- Security Intern**, ([Certificate](#), Site: senselearner.com) **September 2023- October 2023**
- Gained understanding and hands-on experience in comprehensive penetration testing methodologies.
 - Identified and mitigated vulnerabilities, reducing potential security risk by 30%.
 - Utilized industry-standard tools to improve overall security posture by 60%.

ONLINE COURSES & CERTIFICATIONS

- Google Certified Cybersecurity professional, (Google, Coursera) - [Certificate](#)
- Network Support and Security, (CISCO) - [Certificate](#)

EDUCATION

- Bachelor of Technology in Computer Science** **August 2022 - August 2026**
- Galgotias University | Current CGPA: 8.2

ACHIEVEMENTS & SPEAKING ENGAGEMENTS

- Public Speaker**
- Delivered a two session on AI-Powered Cybersecurity: Strengthening Defense with Machine Learning to 200+ attendees.
 - Engaged in panel discussions and Q&A sessions, addressing cybersecurity challenges and AI-driven solutions.
 - Contributed to increasing community engagement by 35% through active participation and knowledge sharing.
- Write ups** (Medium: [Link](#))
- Authored 20+ technical blogs on web security and core cybersecurity concepts, enhancing industry awareness.
 - Provided in-depth analysis on vulnerabilities, methodologies, tools, and security best practices to help professionals and learners improve security postures.
- Hackathon Finalist | Dexterix 4.0**
- Led a team of 5 to the Top 4 out of 100+ competing teams.
 - Developed an AI-powered health and wellness solution integrating traditional remedies, enhancing user engagement by 40%.
 - Designed and implemented data-driven insights for personalized wellness recommendations, showcasing innovation in AI-driven healthcare solutions.
- CyberKnight CTF**
- Ranked 56th among 200 participants in a Capture the flag competition.