Arindam Singh

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Profile Summary

Final-year Cybersecurity Engineering student with experience spanning cybersecurity research, vulnerability assessment, malware analysis, and AI-driven security systems. Passionate about security research, threat intelligence, and the development of secure and resilient technologies.

Education

Bennett University **Aug 2023 – May 2027 (Expected)**
Bachelor of Technology in Computer Science & Engineering (Cybersecurity)

Experience

Research Intern | DRDO Headquarters *(Ministry of Defence, Government of India)* **Jun 2026 – Present**

- Investigating research problems in artificial intelligence, cybersecurity, information retrieval, and defence computing.
- Conducting literature review, comparative evaluation, and experimental analysis of state-of-the-art methodologies and benchmark datasets.

Cybersecurity Analyst Intern | Centre for Railway Information Systems (CRIS) **Jun 2025 – Aug 2025**

- Identified and validated critical vulnerabilities in the e-DRISTI government application through manual security testing.
- Conducted API security testing on the IRCTC Android application, identifying session duplication and authentication weaknesses while validating session management controls.

Achievements

- Achieved **Global Rank 45/9000+** in **OffSec Proving Grounds: The Gauntlet – Echo Response**.

Certifications

- **Certified Ethical Hacker (CEH v13) – EC-Council | [Verify] | ID: ECC8367419502** **Feb 2026**
- **Google Cybersecurity Professional Certificate – Google | [Verify]** **Jun 2025**

Projects

MALSIS-CVE – AI-Assisted Malware Behavior Analysis Platform **[GitHub]**

- Built an end-to-end malware analysis pipeline integrating **Cuckoo Sandbox, MITRE ATT&CK, and the NVD CVE database**, reducing manual correlation time by **80%**. Applied **TF-IDF-based similarity analysis** to map **200+ malware IOCs** to MITRE ATT&CK techniques and automate threat correlation.
- Implemented **CVSS-based severity scoring** and generated dynamic HTML reports for threat visualization.

SecureAPI Scanner – API Security Assessment Platform **[GitHub]**

- Developed a **FastAPI-based API security assessment platform** supporting **3 automated scanning workflows** across individual endpoints, OpenAPI/Swagger, and discovered API surfaces, with an integrated dashboard.
- Engineered **9 vulnerability detection modules** for identifying SQL Injection, IDOR/BOLA, Broken Authentication, SSRF, Command Injection, CORS Misconfigurations, Sensitive Data Exposure, Mass Assignment, and Rate Limiting weaknesses.

NNN-CVE – Pentest Automation & Reporting **[GitHub]**

- Built an automated pentesting platform integrating **3 security scanners** for centralized **IP-based security assessment** through a unified dashboard.
- Automated **OWASP Top 10** reporting in **PDF/JSON formats**, reducing manual effort by **50%**.

Skills

Security Operations & Analysis: Threat Detection, Incident Response, IOC Analysis, Malware Analysis, MITRE ATT&CK, CVE Prioritization, Wireshark, Nessus, Ghidra
Offensive Security & Application Security: Web & API Security Testing, OWASP Top 10, Burp Suite, Nmap, Metasploit, SQLMap, Gobuster, Kali Linux
Programming, Systems & Research: Python, Bash, C++, Java, SQL, Linux, Windows, TF-IDF Analysis, Threat Intelligence, Security Automation