

DEVAN RAJENDRAN

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EDUCATION

Carnegie Mellon University, Heinz College, Pittsburgh, PA (CGPA – 3.88) Expected Graduation - May 2026

Master of Science in Information Security Policy & Management

Relevant Courses: Introduction to Information Security and Management, Introduction to Cyber Intelligence, Software Security, Fundamentals of Operationalizing AI, Ethical Penetration Testing, Information Security Risk Management

National Institute of Technology, Karnataka, India

Graduated - May 2021

Bachelor of Technology in Mechanical Engineering

SKILLS

Security: NexusIQ, BugTrack JIRA, CyberArk PAM, SonarQube (SAST), BurpSuite, Shodan, Threat Analysis, Threat Modelling, Threat Intelligence Gathering, Threat & Strategic Analysis and Reporting, Application Security Testing, Python, numpy, sumy, UTM, WebGoat, Kali Linux, Kafka, Asset Management, Risk Assessment, Risk Appetite, Governance & Compliance, Network Security, Wireshark, Metasploit, Nessus, Nmap, VMware, Apache Kafka

Frameworks: ISO 27001, HIPAA, HITRUST, PCI-DSS, NIST RMF, MITRE ATT&CK, OWASP, OCTAVE Allegro & FORTE, NIST 800-53

Development: JavaScript, NodeJS, NestJS, Typescript, Postman, GitHub, **Deployment:** Microsoft Azure, Kubernetes, Jenkins, Docker,

Monitoring and Ticketing: Dynatrace, Splunk Enterprise, ServiceNow, Quantum Metrics, **Scrum:** Agile, Atlassian JIRA, Confluence

EXPERIENCE

Carnegie Mellon University, Pittsburgh, PA

Research Assistant

May 2025 - Present

- Designed syllabus for integrating a virtual CyberSim lab as a part of a penetration testing course at Community College of Allegheny County (CCAC) aimed at improving collaboration and communication while ensuring proactive learning.
- Curated a database of students mentored by AI professors across key domains (ML, HCI, Computer Vision) to evaluate career outcomes and impact of AI education.

Deloitte USI, Bangalore, India

Consultant

May 2024 - June 2024

- Developed and integrated surgical appointment and doctor's notes feature, enhancing surgical profile accessibility for 200,000 users while fixing over a total of 200+ security bugs (CVEs) and ensuring overall application safety for over 350,000 users per day

Analyst

July 2021 - May 2024

- Served as a **Backend Web Developer** managing 6 REST APIs, through activities such as Development, Testing, Deployments, DevOps, Incident Response Management, User Activity Monitoring (UAM) and Scrum with 13+ releases
- Acted as a **Security Engineer** and carried out **SIEM Monitoring** (Dynatrace, Splunk Enterprise), **Security Operations** (CyberArk PAM, SonarQube), **Vulnerability Management** (NexusIQ, BugTrack JIRA) resulting in logging enhancements, timely certificate renewals and proactive security vulnerability patching
- Secured 300,000+ user records by managing SSL/TLS renewals across 6 APIs and eliminating PHI/PII exposures.

ACADEMIC PROJECTS

ETHICAL PENETRATION TESTING

April 2025

Performed ethical penetration testing on a simulated enterprise network (Jupiter) using Metasploit, Nessus, SQLMap, and WPScan. Identified and exploited critical CVEs such as BlueKeep, Shellshock, gained privileged access, and delivered CVSS-based remediation recommendations.

REAL-TIME AIR QUALITY PREDICTOR WITH KAFKA AND ML-DRIVEN APIS

April 2025

Built a real-time air quality prediction system using Kafka, MLflow, and Dockerized FastAPI, deploying models with engineered time-series features to stream and serve CO(GT) forecasts efficiently.

WEBGOAT HACKING

February 2024

Performed application security testing on WebGoat within UTM, identifying and mitigating OWASP Top 10 vulnerabilities using Kali Linux and BurpSuite (Repeater, Intruder). Developed mitigation strategies, integrated secure coding practices, and strengthened expertise in web security assessments and vulnerability management.

ACHIEVEMENTS

- Won distinguished paper award at the I-4AM 2022 Conference for presenting and publishing a paper – Articulated Robot Arm for Feeding as a book chapter within *Springer Publication: Industry 4.0 and Advanced Manufacturing*
- Member of the Carnegie AI Safety Initiative (CASI) Club and active participant in AI safety-focused reading groups.
- Certified in Cybersecurity (CC) by ISC2.