

Akshat Patel

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Education

University of Maryland, College Park, MD, USA

August 2023 - May 2025

Master of Engineering in Cybersecurity

Relevant Coursework: Cloud Security, Information Assurance, Network Security, Security Tools for Information Security

Teaching Assistant and Grader: INST346: Technologies, Infrastructure and Architecture

Charotar University of Science and Technology, Anand, GJ, India

July 2019 – May 2023

Bachelor of Technology in Electronics and Communication

CGPA: 9.64/10

Teaching Assistant: EC351:Python, EC441:Embedded Systems — research collaboration with the principal and department head, focusing on antenna technology and its cybersecurity implications.

Technical Skills

Languages & Frameworks: Python, C, C++, SQL, JAVA, Perl, Shell Scripting

Security Frameworks HIPAA, GDPR, ISO/IEC 27001, NIST, MITRE ATT&CK, ITIL

Tools & Technologies: AWS, MS Azure, Google Cloud, Wireshark, Snort, Rapid7, Zenmap, OWASP ZAP, Metasploit Framework, Nessus, sqlmap, JAMF Pro, Splunk, Security Onion

Certificates CompTIA Security+, ISC2 CC, Ethical hacking essential, Network Security Essentials (EC-Council)

Experience

Cybersecurity Engineer and IT support Intern

June 2024 – August 2024

University of Maryland

College Park, MD, USA

- Successfully resolved over **200 IT tickets**, maintaining **99.9% system uptime** across the campus.
- Updated **IDS rules**, reducing potential security threats by **25%**.
- Ensured **100% device compliance** with MDM (Intune, Kandji, JAMF Pro) policies, resolving non-compliance issues within **24 hours** using Bomgar remote assistance.
- Defined **department-specific application allow lists**, reducing unauthorized software downloads and reduction in ABR.
- Conducted regular **internal security audits and compliance checks**, ensuring alignment with regulations including **HIPAA, PCI, and SOX**.
- Led **internal data inventory audits**, classifying over **5,000 system and software** entries, and ensuring regulatory compliance. Coordinated with **200+ staff members** and managed vendor communications on data retention policies.
- Conducted **10+ seminars on social engineering and typosquatting**, increasing employee awareness and reducing incident reports by **100%**.

Cybersecurity Intern

Jan 2023 – May 2023

Charotar University of Science and Technology—Dotsquares

Anand—Ahmedabad, GJ, IN

- Led the development of an advanced Intrusion Detection System at Charusat University, enhancing network security by detecting and restricting over **95% of unauthorized network activities** using customized Snort rules.
- Engineered a user-friendly interface for the IDS, facilitating the **analysis of over 10,00,000 network packets daily**, streamlining threat detection and response.
- Conducted comprehensive cybersecurity research on the e-governance website, **identifying and fortifying 30+ security loopholes**, significantly boosting the site's defense against cyber threats.

Projects

Security Assessment and Robust AWS Architecture Design for Healthcare Application | AWS

- Identified key vulnerabilities in cloud infrastructure, VMs, and network security.
- Enhanced data security and aligned with HIPAA compliance standards.
- Incorporated multi-AZ deployments, secure data storage solutions, and advanced AWS services to ensure high availability and disaster recovery readiness.
- Enhanced security posture, achieved full HIPAA compliance, and improved system availability and disaster recovery readiness.

CMMC 2.0 Level 1 Compliance and Security Enhancement for Web Application Infrastructure | Nmap, Nikto

- Identified and mitigated 18+ security vulnerabilities/non-compliance issues.
- Ensured compliance with CMMC 2.0 Level 1 and enhanced defense against cyber threats.
- Achieved CMMC 2.0 Level 1 compliance, reduced unauthorized access attempts by 99.9%, and improved overall security posture.

The Security Architecture Redesign and Proposal for CustomerFirst Bank | OWASP ZAP, MITRE ATT&CK FW

- Redesigned Security Architecture for CustomerFirst Bank, improving threat detection by 40% and reducing vulnerabilities by 30% within a \$500K budget.
- Ensured 100% Compliance with GLBA and PCI-DSS, achieving a 100% audit pass rate for the bank's systems.
- Enhanced Endpoint Security for remote devices, resulting in 99.9% compliance across Windows, Mac, and Linux platforms.

PUBLICATION

Privacy Challenges and Solutions in implementing Searchable Encryption for Cloud Storage, Springer