

# PRIYESH E.M

Arlington, VA | [priyeshem3@gmail.com](mailto:priyeshem3@gmail.com) | (571) -977-8072 | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

## EDUCATION

**The George Washington University, School of Engineering & Applied Science**  
Master of Science in Cybersecurity in Computer Science (CGPA: (3.5)/4.0)

**Washington, DC**  
**December 2025**

**Symbiosis International University**  
Master's in System Security (CGPA: 7.54/10.0)

**India**  
**December 2022**

**Vijayanagara Sri Krishnadevaraya University**  
Bachelor of Computer Applications (CGPA: 8.7/10.0)

**India**  
**December 2020**

## TECHNICAL SKILLS

- **Programming/Scripting Languages:** Python, Java, C#.Net, C, C++, Bash, PowerShell, SQL, HTML, JavaScript, Linux Scripting
- **Security & Network Tools:** Metasploit, Burp Suite, Nmap, Nessus, Wireshark, OpenVAS, Splunk, Microsoft Azure AD, Snort, OSSEC, Suricata, ELK Stack (Elasticsearch, Logstash, Kibana)
- **Cybersecurity & Technical Expertise:** Penetration Testing, Vulnerability Assessment, Threat Detection, Incident Response, Risk Management, Security Automation, DevSecOps (CI/CD Security Integration), Identity & Access Management (IAM), Zero Trust Security, Cloud Security (AWS, Azure, GCP), Network Security Monitoring, Web Application & API Security (OWASP Top 10, Secure Coding)
- **Data Security & Compliance:** Proficient in securing sensitive data and ensuring compliance with industry standards (HIPAA, ISO 27001, NIST, SOC2, PCI-DSS), Implemented data loss prevention (DLP) strategies and cryptographic solutions
- **Cross-Functional Collaboration & Leadership:** Worked with multi-disciplinary teams to resolve cybersecurity challenges; Experience in cloud computing, network security, Governance, Risk, and Compliance (GRC), Led security awareness training and collaborated with IT teams to enforce security best practices

## RELEVANT WORK EXPERIENCE

**Ernest and Young - Global Delivery Services**

**India**

**Analyst - Business Consulting - Technology Risk Management**

**June 2022 - December 2023**

- Led over **10+** technology, business, and security audits as an analyst, ensuring compliance with industry standards.
- Played a key role in completing **two major projects** focused on audit automation, compliance tracking, and security tool enhancements, improving operational efficiency by **30%**. Optimized data analysis workflows using advanced Excel functions, reducing manual effort in compliance reporting by **40%** through automation and streamlined data processing.

**Illumine Career Center**

**India**

**Penetration Tester - Intern**

**January 2022 - May 2022**

- Led over **5+ front-end development projects**, enhancing **UI/UX** functionality and improving application responsiveness by **30%**. Conducted penetration testing and network monitoring, identifying and mitigating **12+** security vulnerabilities, and strengthening system defenses.
- Managed access-control systems, ensuring secure authentication and role-based access, reducing unauthorized access incidents by **25%**. Provided IT support, maintaining **99.0%** system uptime, troubleshooting technical issues, and optimizing digital system operations for better efficiency.

## RESEARCH PUBLICATIONS

- **"A Machine Learning-Based Novel Cyber Intrusion Detection System for Network Administration"** – Accepted for publication in top Q1 and Q2 journal, 2024; focuses on ML-driven cyber threat detection and mitigation.
- **"Cryptography System for Securing Data Image in Fog Computing"** – Accepted for publication in top Q1 and Q2 journal 2025; explores encryption techniques for secure data transmission in fog computing.
- **"Deep Learning Algorithm for Cyberbullying Detection on Social Media"** – Accepted for publication in top Q1 and Q2 journal 2025; applies deep learning models to detect and prevent cyberbullying patterns on social media.

## TECHNICAL PROJECTS

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### SIEM Sentinel

June 2025

- Built a web-based SIEM tool using Python and Flask for analyzing security logs. Features include automated detection of brute-force attacks, port scans, and blacklisted IPs, with geolocation enrichment and an interactive dashboard for centralized alert management.

### CTI Dashboard

May 2025

- Using Flask, built a Cyber Threat Intelligence (CTI) dashboard that displays IP reputations through the AbuseIPDB API. Security analysts could then assess, filter, and investigate IPs considered malicious through an interactive, real-time interface.

### MOM (My Own Medic)

Marh 2025

- An AI-powered personalized healthcare assistant that integrates with EHRs using **FHIR API** to provide real-time health tracking, predictive analytics, and proactive recommendations, ensuring **HIPAA-compliant security** and seamless wearable device integration for enhanced user health insights.

### Echo Client – Server Encryption

Sep 2024

- Developed a **hybrid encryption system** for a **secure echo client-server**, implementing RSA key pair generation for secure key exchange. The client encrypts a symmetric AES key and HMAC key using RSA (OAEP padding), ensuring end-to-end data confidentiality. Applied AES-CBC mode for encryption and SHA-256 for HMAC, strengthening data integrity and security.

### Cyber intrusion detection and notifying systems using ML approaches

June 2021

- Developed a **Cyber Intrusion Detection System (CIDS)** using Machine Learning, detecting **10+** cyber-attack types with **90%** accuracy and integrating a real-time alert system for instant threat notifications to administrators.

### Alumni Portal

December 2019

- Alumni Portal is a stand-alone, real-time application developed using C#.Net with primary requirements, to collect, store, and maintain passed-out student information of a particular college. The backend of the application is designed via **SQL Server**.

## CERTIFICATIONS

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- **AWS Certified Security – Specialty (SCS-C02)** - Advanced AWS security, covering specialized data protection, infrastructure security, incident response, IAM, and comprehensive monitoring
- **RedHat** – System Administration I and II (**RH124 and 134, 2025**), OpenShift Administration I (**RHDO180, 2025**).
- **AWS Academy Cloud Security Foundations (AWS, 2025)** – Fundamentals of securing AWS cloud environments, including identity and access management, data protection, incident response, and compliance best practices
- **AWS Academy Cloud Operations (AWS, 2025)** – Core AWS operations skills including monitoring, automation, scaling, and incident response.
- **AWS Academy Cloud Foundations (AWS, 2025)** – Fundamentals of AWS cloud architecture best, security, and practices
- **Career Essentials in Cybersecurity (Microsoft & LinkedIn, 2025)** – Core cybersecurity concepts, risk management, and threat mitigation strategies.
- **Cybersecurity Analyst Job Simulation (Tata Group, 2024)** – Hands-on experience in security operations, threat detection, and incident response.
- **Google Cybersecurity Specialization 2024** – Security principles, vulnerability management, and compliance frameworks.
- **Cyber Security Certification (NIT Rourkela)** – Advanced training in network security, cryptography, and penetration testing.
- **Python Programming Certification (IANT)** – Python for automation, data security, and scripting in cybersecurity applications.
- CompTIA Security+ (Target: Summer 2025) & CEH (Target: Fall 2025)

## LEADERSHIP

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- **President** – George Washington Desis Organization & **Vice President** – Google Developer Groups (GDG) at GWU  
Spearheaded technical initiatives, cultural programs, and community engagement efforts to foster innovation and inclusiveness. Led multiple tech workshops, hackathons, and networking events to bridge the gap between students and industry experts.
- Former IEEE Member at SICSR, actively contributed to Stage 0 technical and cultural events during my bachelor's degree.
- **Guinness World Record Holder** – Western & Classical Dance  
Achieved global recognition for excellence in Western and Classical dance, showcasing dedication, discipline, and performance excellence. Secured national-level achievements in Western dance competitions, demonstrating commitment to the performing arts.
- **Multifaceted Athlete & Artist**  
State-Level Football Player, showcasing teamwork, strategy, and perseverance. Accomplished painter and guitarist, demonstrating creativity, artistic expression, and a well-rounded skill set beyond the technical domain. Successfully balanced sports, arts, and leadership roles, emphasizing adaptability, collaboration, and a growth-oriented mindset.