

EDUCATION

MSc Cyber Security Engineering (Merit)

University Of Warwick, UK

September 2023 – November 2024

- Recipient Of WMG Excellence Scholar Award
- UK’s National Cyber Security Centre (NCSC) Certified

B.Eng. in Electronics and Communication (Distinction)

KLE Technological University, India

August 2016 – May 2020

Minor Program In Computer Science (Distinction)

KLE Technological University, India

January 2018 – January 2020

Karnataka Board Of Pre-University Education (First Class with Distinction)

March 2016

CERTIFICATIONS

github.com/yjavali/certifications

- OSCP (In Progress)
- Microsoft Certified Azure Cloud Fundamentals (AZ – 900)
- IBM Architectural Thinking for Security

TECHNICAL SKILLS

- Programming Language: Python, Java, SQL
- Security Tools and Technologies: Nmap, Wireshark, SonarQube, Docker, Kubernetes, Trivy, OWASP ZAP, Seccomp, AppArmor, Postman, Git, Threat Modelling, MITRE Framework (ATLAS and ATT&CK), NIST and Burp Suite

ADDITIONAL INFORMATION

- Languages: English (CEFR Level: C1, IELTS Score: 8.0/9)
- Ranked in Top 11% of Cloud Security voices on LinkedIn through technical contributions

PROFESSIONAL SUMMARY

Accomplished **Cyber Security Engineer** with a consistent record of academic excellence (Distinction and Merit). Proven expertise in Container Security, Vulnerability Management, and Secure Software Development. Skilled in aligning technical solutions with GDPR and ISO-27001 compliance frameworks.

PROJECTS

github.com/yjavali/projects

Enhancing Data Privacy for Multi-Cloud Data Processing

October 2023 – September 2024

- Developed a **secure Multi-Cloud Architecture** leveraging **Homomorphic Encryption** for **GDPR-compliant Data Privacy**.
- Conducted comprehensive security assessments (**STRIDE**, **MITRE ATTACK**, and **ATLAS**) to validate privacy preservation and regulatory compliance.
- Integrated **LLM** for interpreting derived computed result, delivering actionable insights for federated data analysis.

EXPERIENCE

Software Engineer

ThinkSeed Systems | January 2023 – July 2023

ThinkSeed Systems is a Tier 2 OEM specialising in developing middleware solutions for enhancing in-car connectivity, security, and infotainment.

- Strengthened container security through **Image Hardening** (Base OS migration, Docker Content Trust), reducing attack surfaces by 45%.
- Implemented **SAST and DAST** pipelines in dockerised environments to detect critical vulnerabilities.
- Conducted **SCA** using Trivy, ensuring compliance with secure development practices by identifying and remediating third-party dependency issues.
- Engineered runtime security enhancements for containerised applications, employing **System Call Filtering** (using Seccomp profiles, AppArmor) and **Kernel Capability Restrictions** to prevent privilege escalation attacks.

Associate Software Engineer

Aptean India | March 2021 – January 2023

Aptean is a global leader in providing industry-Specific ERP, MES and supply chain software solutions through SaaS and on-premises models.

- Resolved 27+ high-priority vulnerabilities, addressing **OWASP** Top 10 issues such as Broken Authentication, Cryptographic Failures, and Security Misconfigurations across web and API layers.
- Designed secure coding modules using **Spring MVC**, integrating robust input validation, output encoding, and error-handling mechanisms.
- Collaborated with C-level executives and development teams to deliver actionable security briefings, improving system resilience against cyber threats, and earning recognition for exemplary problem resolution.

Graduate Engineer Trainee

Skykrafts Aerospace | January 2020 – February 2021

Skykrafts Aerospace designs and manufactures drones (UAVs) for consumer, commercial and enterprise applications.

- Enhanced UAV communication security by integrating **TLS encryption** over Wi-Fi, safeguarding data integrity and confidentiality.
- Optimised multithreading algorithms to improve real-time video streaming and sensor monitoring for UAV fleet management.