Arsh Imtiaz

Broadgate, Coventry, England

https://arshimtiaz.github.io | arshjamadar5@gmail.com

https://github.com/c0ncatenate | https://linkedin.com/in/arsh-imtiaz

Professional Summary

A Cybersecurity Engineer with strong expertise in Penetration Testing, Vulnerability Management, Intrusion Detection and Prevention, and SIEM deployment. Experienced in securing embedded systems and software-defined vehicles in compliance with automotive cybersecurity standards. Skilled in Zero-Trust network access implementation and real-time Security Incident Response across diverse platforms.

Core Competencies

- **Programming:** Python, C, C++, Node.js, x86 Assembly
- **Penetration Testing & Tools:** Nmap, Metasploit, Burp Suite, OWASP ZAP, Nessus
- **Exploit Development & Reverse Engineering:**
  - Buffer Overflow
  - Memory Corruption
  - Shellcode Writing
  - Static & Dynamic Analysis
- **Containerization**: Docker, Kubernetes, QEMU/KVM/VMware/VirtualBox (Virtualisation)
- **Security Monitoring:** SIEM (Wazuh, ELK), Incident Response, Log Analysis
- **Systems:** Linux (Arch, Debian), Windows, Embedded Systems (ECU Security)
- **Network Security:** Firewall/IDS/IPS, VPNs, Zero Trust, Secure Tunnelling
- **Standards:** UNECE R155 & R156, ISO 21434, ISO 27001
- **Soft Skills:** Risk Assessment, Collaboration, Technical Documentation

Experience

JULY 2023 – AUGUST 2024

Tata Technologies, Warwick, United Kingdom

Cyber Security Engineer

- Conducted penetration testing on Electronic Control Units (ECUs) and embedded systems within Software Defined Vehicles (SDVs), ensuring alignment with UNECE R155 & R156 and ISO 21434 automotive cybersecurity standards.
- Collaborated with a premium automotive client as part of the ECU testing and validation team, contributing to system security and reliability enhancements.
- Developed payload scripting focused on realistic attacker experience to simulate complex threat scenarios.
- Assisted in risk management, incident response planning, and supplier security compliance.

Education

SEPT 2021 – JUN 2025

Coventry University, United Kingdom

First Class Honours – Bachelor of Science in Ethical Hacking and Cyber Security

Dissertation – Blockchain-Enabled Secure Communication System for Enhanced Privacy and Integrity

- Conducted research on decentralized communication leveraging blockchain technology to improve data integrity and user privacy
- Developed and tested smart contracts using Solidity with Ganache and Truffle frameworks
- Integrated backend services using Node.js and managed data with MetaMask.
- Analysed security challenges in conventional communication systems and proposed blockchain-based solutions
- Demonstrated both practical implementation skills and theoretical knowledge in cybersecurity and decentralized systems

Self-Driven Projects and Skills

- Designed and implemented a Security Information and Event Management (SIEM) environment for vulnerability detection across Windows and Linux systems.
- Developed zero-trust network access solutions and secure tunnelling for remote access to private services.
- Independently mastered multi-OS system hardening, log analysis, and automated security monitoring tools to enhance personal cybersecurity expertise.

Interests and Achievements

- Top 1% rank on TryHackMe; achieved GURU level by completing over 120 rooms.
- Ranked 12th in Coventry Galactic Capture the Flag (CTF) 2022; first among academic year peers.
- Delivered a first-class graded group project presentation on OWASP Injection vulnerabilities.
- Passionate about continuous learning, cybersecurity challenges, reading, guitar, and spending quality time with family and friends.

References

Available upon request.