

VASANTHAVANAN M

College Park, MD | [Portfolio](#) | [LinkedIn](#) | [Email](#) | [Github](#) | [Medium](#)

EDUCATION

University of Maryland, A. James Clark School of Engineering

College Park, MD, USA

Aug 2023 - May 2025

- **Master of Engineering, Cybersecurity.**
- relevant coursework: hacking of c programs & unix binaries, networks and protocols, cloud security
- upcoming coursework: penetration testing, tcp/ip networking, digital forensics incidence response, software defined networking

Anna University, Thiagarajar College of Engineering (TCE)

Madurai, TN, India

Jul 2016 - Jun 2020

- **Bachelor of Technology (B.Tech), Information Technology.**
- special interest group (SIG): information security & privacy
- relevant coursework: computer networks, dbms, offensive security, ethical hacking, network security, system administration.

PROFESSIONAL EXPERIENCE

Safer Internet Project (saferinternetproject.com.au)

Perth, Australia

Security Analyst (Experience: 8 Months) [Remote]

Nov 2022 – Jun 2023

- produced professional vulnerability assessment reports using industry standard templates.
- applied black-box penetration testing skills to address vulnerabilities leading to 20% reduction in potential security breaches.
- conducted OSINT investigations using various social engineering methodologies uncovering critical information leaks.
- **Skills:** penetration testing, vulnerability assessment, reconnaissance, privilege escalation

IBM India Private Limited (www.ibm.com/in-en)

Bangalore, KA, India

Software Developer, CIO-SIS (Experience: 23 Months)

Jan 2020 – Nov 2021

- developed web applications with angular, laravel, and created data processing services using Spark, Scala (BIM-CCA).
- teamed up with cross-functional teams to integrate secret server in CUST-RI scala service, reducing unauthorized access.
- contributed to test driven development (TDD) on achieving 80% code coverages meeting the industry standard.
- **Skills:** software development, web application, agile methodologies, secure code review

RESEARCH EXPERIENCE

IBM Patents and Innovation

Bangalore, KA, India

Topic: Data Model Standardisation using Hyper Ledger Fabric Blockchain

Apr 2021 - Sep 2021

- led a collaborative research project in support with colleagues resulting in the submission of a patent to IBM in 2021.
- developed a intelligent blockchain network that maintains the data model integrity with various attributes rules.
- conducted research on enhancing the coverage rules, and publishing visual data model diagrams from the DDLs.
- collaborated with developers to create a database structure across all FMS modules, reducing data errors by 30%.

ACADEMIC PROJECTS

Zero Hunger using Ethereum Blockchain ([Github](#))

Aug 2019

- ethereum-based automated food assistance system that donates food to people using decentralised authority, ensuring transparency with a public ledger and PoA authentication.
- **Tech Stacks:** hyperledger, blockchain, composer-rest-server, git-hook

AR-Bots using Augmented Reality

Sep 2018

- AR-Bots is an tour guide project that enables users to share information without human resources, featuring an augmented character and efficient chatbot with an effective navigation algorithm.
- **Tech Stacks:** vuforia, unity, tensor flow, and IBM watson assistant.

SKILLS

- **Languages:** Scripting - Python, Shell. Programming - C, C++, Basics of Java.
- **Competencies:** Penetration Testing, Network Security, OWASP top10, SANS top 25, MITRE ATT&CK.
- **PenTesting tools:** Network Mapper (Nmap), Wireshark, tcpdump, BurpSuite, ZAP, Metasploit, SQLMap, Nessus, Mimikatz, BeEF, Shodan, Hydra, Autopsy, Hashcat, Snort.
- **Network Skills:** Firewalls, Router, Switches, Troubleshooting, TCP/IP, DNS, IDS/IPS, VPN.
- **Technology & Operating Systems:** Blockchain (Ethereum, Hyperledger), React, Angular, Kali Linux, Mac OS, Windows.

CERTIFICATIONS

- **CompTIA Network+** (verify: Q85MJ88F734119GZ) February, 2022
- **CompTIA Security+** (verify: QGSWZKZP0DFQ19G3) May, 2022
- **eLearnSecurity Junior Penetration Tester (eJPT)** (verify: 6119394) July, 2022
- **Certified Ethical Hacker (CEH)** (verify: ECC1982743650) October, 2022