

Harshith Motipalli

Chantilly, Virginia | ☎ 571-306-9738 | ✉ motipalih2@gmail.com | in www.linkedin.com/in/harshith-motipalli

EDUCATION

George Mason University, Fairfax, VA

May 2027

- Bachelor of Science in Cybersecurity Engineering, Minor in IT
- Relevant Coursework: Digital Electronics, Computing Digital Systems Engineering, Intro to Cybersecurity Engineering, Intro Computer Programming, Linear Algebra, Discrete Mathematics I, Analytic Geometry & Calculus III, Operating Systems, Computer Programming for Engineers, Object Oriented Modeling and Design

EXPERIENCE

Software Development Internship, South Asian Business Council of Virginia

June 2025 - Present

- **Collaborated** in a **fast-paced team** environment to **design, develop, and deploy** Android **applications** from concept to production release.
- **Developed** intuitive, user-friendly mobile interfaces using **Kotlin, Python, and modern Android development tools and frameworks**.
- Contributed to **continuous improvement** practices by iterating on app performance and user feedback.

Lead Cloud Engineer, George Mason University HACKFAX

Oct 2024 - April 2025

- **Automated deployment pipelines** and **network observability** tools using **Microsoft Azure**, integrated with **IAM, NSGs**, and telemetry pipelines.
- Developed **Infrastructure-as-Code (IaC) scripts** and documented secure, **multi-tier network topologies** for repeatable use.
- Incorporated **security architecture** principles into network design, **applying cryptographic methods** and IAM security practices.

Co-Founder, Certly.AI

Aug 2024 - Present

- Developed an **AI-powered backend with Python**, integrating telemetry-based user feedback and real-time performance metrics, **aligning with network automation insights**.
- Focused on **innovation** in adaptive learning technologies for certification preparation.

Lead Network Engineer, George Mason University HACKFAX

Nov 2023 - March 2024

- **Engineered and deployed network environments** using **Cisco Packet Tracer** and **IOS CLI**, including network probes and endpoint configurations similar to Cisco ThousandEyes.
- Performed **simulated attacks** to validate **incident response** workflows and integrated results into security runbooks.

PROJECTS

American Sign Language to Text Translator:

- Developed a **machine learning model using Python, TensorFlow, and Node.js**, demonstrating high accuracy in real-time American Sign Language translation from a webcam through **continuous model improvements**.
- Implemented **advanced image preprocessing** and **optimized training data** to minimize classification errors.

Accessibility Mapping Web App:

- Designed and deployed a **crowdsourced accessibility mapping application** using **React, TypeScript, and Google Maps API**, enabling **users to mark locations for accessibility features**.
- Developed and deployed a **real-time tagging system**, fostering increased user engagement and significantly enhancing data accuracy for accessibility mapping.
- **Optimized application performance, reducing API call latency** and improving state management.

SKILLS

- **Certifications:** Cisco Certified Networking Associate (CCNA), CompTIA Network+, CompTIA Security+, AWS Cloud Practitioner, AWS AI Practitioner, CompTIA A+, CompTIA CSIS, CompTIA CIOS
- **Computer:** Python, Java, C++, Go, C#, Perl, PowerShell, SQL, HTML5, CSS, JavaScript, React, PHP, Packet Tracer, Linux (Ubuntu & Kali), Windows (Home/Server/8/10/11), macOS, TCP/IP, DHCP/DNS, VLAN, VPN, OSPF, IPSEC, ACLs, SNMP, SMTP, Azure, Git, Netflow, Splunk, Wireshark, Grafana, Prometheus
- **Security & Systems:** Network Security, Cryptography (AES, RSA, PKI), Security Architecture, Threat Modeling, Incident Response, IoT Security, Artificial Intelligence, Machine Learning, Deep Learning, Neural Networks, Edge AI
- **General:** Communication, Leadership, Teamwork, Problem solving, Critical thinking, Management, Organization, Networking