

EXPERIENCE

- Research Associate

Michigan Technological University

Sep. 2022 – Present

Houghton, MI

- **Cybersecurity Training:** Managed and instructed over 40 students in cybersecurity best practices for various Graduate and Undergraduate-level classes, emphasizing defense mechanisms and secure system architectures.
 - **Infrastructure Management:** Built and managed a Dell R640 server equipped with 3 T4 GPUs and 780GBs of RAM, designed for advanced AI computing. Implemented robust cybersecurity practices and security rules to safeguard the server from potential threats.
 - **Virtual Teaching Assistant:** Spearheaded an end-to-end virtual teaching assistant project used by over 30 students for their courses.
 - **Virtual Teaching Assistant Architecture:** Utilized a Retrieval-Augmented Generation (RAG) architecture to manage local knowledge for LLMs. Experimented with models like Mistral, OpenAI’s GPT-3, GPT-4, and Llama 2, integrating BAAI/bge-small-en for embedding generation. Employed OpenAI’s APIs for extended functionality. Containerized the web application using Docker, developing the frontend with Python-based FastAPI and Gradio.
- Information Security Intern

AirBoss of America Corp.

June 2023 – Dec 2023

Houghton, MI

- **Data Classification Project:** Led a large-scale data classification project for categorizing diverse data types using Azure’s compliance hub and Azure Purview.
 - **Data Loss Prevention Policies:** Developed detailed Data Loss Prevention Policies (DLP) aligning with NIST 800-171 standards, enhancing data compliance by 40%.
 - **Incident Response:** Played a key role in the rapid response team for email-based threats, enhancing organizational resilience against phishing and malware. Specialized in threat remediation by removing malware and addressing account/machine compromises, thus successfully mitigating security threats.
 - **Vulnerability Assessments and Remediation:** Conducted comprehensive security assessments, identifying vulnerabilities and enhancing defenses, particularly in cloud environments.
 - **Security Solutions Engineering:** Architected and implemented a Double Key Encryption (DKE) solution using .NET, enhancing data protection. Configured Azure WAF Firewall and geolocation blocking to fortify cloud environments, aligning with NIST 800-171 compliance requirements.
 - **User Sessions and Surveys:** Conducted impactful user sessions and surveys for 500+ company employees, leading to a 20% improvement in overall company data security posture.
- Senior (Software) Systems Engineer

Infosys Ltd.

Oct 2020 – Jul 2022

Bangalore, India

- **Web Apps Revamp:** Revamped legacy windows apps into Angular-based web apps, while developing a .NET REST API.
 - **Production Optimization:** Optimized production environment by slashing downtime, improving SQL queries and boosting performance by 20%.
 - **Documentation:** Produced comprehensive documentation for onboarding, ticketing, recurring bugs and their fixes, lifting efficiency of SLA deliverables by 35%.
 - **Team Mentorship:** Mentored a 5-member team, clarifying project architecture and CI/CD pipelines.
 - **Technology Stack:** Utilized Angular for frontend, .NET for backend, SQL Server for database management, TFS for version control, and Azure VMs for hosting.
 - **Agile Methodology:** Followed agile methodology for project management and used Azure Boards for streamlining workflow.
 - **Awards and Recognition:**
 - * Received *INSTA Award* for review effectiveness, improved quality of deliverables by 20% and extending and aligning with the team’s need.

SKILLS

- **Technical Skills:** Azure, Linux, Agile, Scrum, Docker, Automation, Git, OOPs, TFS, Angular, RAG, LLMs, Rest-APIs, Huggingface
- **Security Skills:** Cloud Security, Vulnerability Assessment, Cybersecurity Administration, Security Integration, Security Operations, Email Security, Azure Compliance, Microsoft Defender 365, Triage, NIST, Incident Response, Microsoft Entra ID, Wireshark, Hashcat, Cryptography, Open-Source Intelligence, Security Auditing
- **Programming:** Python, C++, Typescript, SQL
- **Communicative Languages:** Native Proficiency - English, Gujarati, Hindi
- **Certificates:** Python by Coursera, National Cyber League 2023 (CTF), CompTIA Security+ (preparing)

EDUCATION

- Michigan Technological University

Master of Science in Cybersecurity; GPA: 3.95

Houghton, MI

Aug. 2022 – April 2024
- SRM Institute of Science and Technology

Bachelor of Technology in Software Engineering; GPA: 3.5

Chennai, India

June 2016 – May 2020

EVENTS

- **Red Team - CyberSecurity Student Organization & Networking and Computing Student Association, Michigan Tech:** Current/Last Competitions and conferences - eCTF by Mitre, CyberSeed(12/196), National Cyber League (NCL)(17/365), CypherCon, and SecretCon.