Hemantha Krishna Challa

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EDUCATION

The University of Texas at Dallas   Expected Graduation: May 2026

Master of Science, Computer Science with Cybersecurity track   ***GPA 3.67***

- NSA CAE Designations (Expected): Graduate Level Designation in Cyber Operations (CAE-CyberOps); Graduate Certificate in Cyber Defense (CAE-CDE)

SRMAP University, AP, India   Graduated: May 2024

Bachelor of Technology, Computer Science, specializing in Cybersecurity   ***GPA 3.60***

- *Awarded 50% merit-based scholarship for academic achievement*

TECHNICAL SKILLS

- Cybersecurity Skills: Network Security, Threat Analysis, Intrusion Detection Systems (IDS), NIST Framework Concepts (correlating data & policies), Vulnerability Assessment Principles, Risk Management Fundamentals, SIEM, Snort, Wireshark, Cryptography.
- Programming Languages: Python, C, C++, Java, bash
- Cybersecurity Skills: Network Security, Threat Analysis, Intrusion Detection Systems (IDS), Cryptography.
- OS & Virtualization: Linux (Ubuntu, Fedora, Arch), Virtual Machines (VMs)
- Databases: MySQL, MongoDB
- Web development Skills: HTML, CSS, JavaScript, ReactJS, Node.js, PHP (Awareness of OWASP Top 10)
- Software: Microsoft Office Suite (Excel, PowerPoint, Word), Git

CERTIFICATIONS

CompTIA Security+ (SY0-701), Issued: May 2025

PUBLICATIONS

Task Offloading Technique Selection in Mobile Edge Computing (MEC), MEC Project

- Analyzed ML algorithms for optimizing task offloading decisions in MEC environments. Status: Presented IEEE ASSIC 2024; Published in IEEE Xplore.

Machine Learning Intrusion Detection with Explainable AI, Capstone Project

- Developed & evaluated ML models (LogReg, RF, DT, KNN, SVM) for network intrusion detection; applied XAI (SHAP, LIME) for interpretability relevant to incident analysis. Status: **Under Review, Springer Journal**.

ACADEMIC PROJECT EXPERIENCE

Web Security Exploits & Defenses

- Executed penetration testing on a web app, identifying and mitigating XSS, CSRF, and SQL injection. Implemented defenses and secure coding.

Software Vulnerability Exploits

- Performed low-level software exploits (e.g., buffer overflows, return-to-libc) in Linux. Analyzed OS defenses like ASLR & Stack Canaries.

PROFESSIONAL EXPERIENCE

Web Development Intern at **Jayaho, CCC Digital India Pvt. Ltd.**, Hyderabad, Telangana, India   Jun 2022 – Aug 2022

- Improved the website design of the company, boosting user engagement by 20%
- Developed a prototype for an e-learning website using ReactJs, improving user flow and reducing development time by 10%

ADDITIONAL INFORMATION

- Soft Skills: Problem-solving, Communication, Teamwork, Leadership, **Adaptability, Patient Instruction**
- Languages: English, Telugu, Hindi, Japanese (elementary)
- Eligibility: VISA, Eligible to work in the US for internships and full-time for up to 36 months