

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 3.33

- 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 Concepts, Risk Management Fundamentals, Security Log Analysis Concepts (familiar with SIEM principles, eager to learn Splunk), Wireshark, Cryptography.
- OS & Virtualization: Linux (Ubuntu, Fedora, Arch), Virtual Machines (VMs)
- Databases: MySQL, MongoDB
- Programming Languages: Python, C, C++, Java, bash
- Web development Skills: HTML, CSS, JavaScript, ReactJS, Node.js, PHP (Awareness of OWASP Top 10)
- Software: Microsoft Office Suite (Excel, PowerPoint, Word), Git

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**.

CERTIFICATIONS

CompTIA Security+ (Sec+) - Actively studying for certification, expected completion - May 2025.

ACADEMIC PROJECT EXPERIENCE

Encrypted File System, Information Security Project

- Developed a secure file system using AES-128 (CTR) and SHA-256 for encrypted storage and tamper detection, with HMAC integrity checks. Implemented PBKDF2 and Optimized block storage for minimal disk access.

Photo Sharing app, Web development Project

- Built full-stack application (MongoDB, Express.js, React, Node.js) implementing secure user authentication, session management, and input validation, applying secure development practices.

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
- Languages: English, Telugu, Hindi, Japanese (elementary)
- Eligibility: VISA, Eligible to work in the US for internships and full-time for up to 36 months