

EDUCATION

University of Massachusetts Amherst, Amherst, MA

Candidate, December 2024

College of Engineering: *Bachelor of Science in Computer Engineering*

Relevant Coursework

Networked Embedded Systems, Synthesis & Verification of Digital Systems, Computer Architecture, Intro to Cryptography, Math Tools for Machine Learning, Systems Programming, Hardware Organization & Digital Design, Security Engineering, Intro Embedded Systems, Probability and Statistics, Data Structures and Algorithms, Linear Algebra, Complex Numbers

TECHNICAL SKILLS

Proficient in Golang, Shell, TypeScript, JavaScript, Python, HTML, CSS, React, Node, MongoDB, SQL, Redis, Git, Linux, REST APIs

Have Worked with Scrum/Agile, C, Docker, Kubernetes, Helm, OCI, Google Cloud, AWS, Azure, CI/CD Pipelines, Testing Automation

WORK EXPERIENCES

University of Massachusetts Engineering, Amherst MA

Sept 2023 – Current

Undergraduate Teaching and Research Assistant - Security Engineering

- Develop hands-on lab experience for 50+ students by implementing syncing protocols on NRF9160 5G IoT boards
- Engineered data collection instruments focused on precise timing metrics, streamlining data acquisition processes
- Recorded errors in time syncing protocols over 5G, facilitating new research avenues into network time synchronization
- Collaborate with professor to document findings and build appropriate curriculum for security engineering courses

CarGurus, Boston, MA

Jan 2023 – June 2023

Engineering Co-op - Platform as a Service

- Improved CLI tool for internal developers in Golang and Kubernetes to enable remote deployment, improvement of internal developer tools, resulting in reduction of deployment and improved developer experience
- Collaborated with developers across teams and stakeholders under Scrum and Agile practices to deliver features and fix bugs
- Built tab-autocomplete scripts for the CLI independently, leading to improvement in developer experience and productivity
- Developed a GPT-4 based tool for log analysis and referencing company documentation to present resources and solutions, and successfully presented it to the VP and the engineering platform team

AudioShelf, Co-Founder / Backend Dev

February 2022 – March 2023

- Designed backend API in typescript and audio content delivery service and microservices architecture on Google Cloud
- Developed CMS dashboard and supporting API for content, and user management for 2,500 application users in React
- Setup pipelines to deploy APIs on Google Cloud in production using Docker, enhancing supports for autoscaling on edge
- Lead a team of two developers in backend development pipeline through task delegation and code review on GitHub

University of Massachusetts IT, Amherst, MA

Fall 2021 – Current

Computer Classroom Assistant

- Provide over-the-phone and in-person support on classrooms technology to 2-3 classroom instructors and technology labs
- Perform routine inspections and maintenance of 4-5 lab computers, maintaining operational efficiency in technology labs
- Manage IT ticket systems for technical support and communicate urgent issues with managers throughout shift

Cisco, Bangalore, India

August 2019 – February 2020

Cisco Talent Outreach Program

- Collaborated with five team members to develop event management platform for high schools as part of 3 months project
- Developed responsive desktop and mobile UI dashboard implementing mobile-first approach using Python Django WebApp
- Built all CRUD operations for back-end REST API, resulting in under two seconds loading time with full functionality
- Presented and demonstrated project to 20+ senior members of Cisco, praised for thoughtful features and pitch

PROJECTS

Lord of the Lunchroom, Winner of "Funnest" Prize at HackUMass 2022

November 2022

- Built hardware disguised in hats in Wild-West-style duel challenge in collaboration with three team members
- Developed game code and matchmaking server for ESP8266 in C and JavaScript which enables two people to duel
- Presented and demonstrated in-game actions to five judges by explaining hardware usage and tools choice

LEADERSHIP ACTIVITY

HackUMass, Embeddings in Generative AI Workshop

November 2023

- Delivered a hands-on workshop on Contextual Generative AI to over 25 participants
- Developed and shared educational materials on context extraction, semantic search and embedding models
- Compiled a diverse array of real-world applications of embeddings, showcasing the practical use of embedding models