

EDUCATION

Bachelor of Software Engineering | 3.7 GPA | Certificate of Cyber Defense | Auburn University

May 2025

SKILLS

- Languages: C, C++, F#, Java, JavaScript, Python
- Tools: Ansible, Bash Scripting, Docker, Git, GCC, GDB, Linux, NodeJS, VMWare, MongoDB, SQL, Netcat, Wireshark

WORK EXPERIENCE

Auburn University PASER Lab

January 2024 – May 2024

Website Developer

Auburn, AL

- Developed a full-stack web-based learning platform to teach students secure coding practices
- Implemented front-end and back-end functionality using Node.js, JavaScript, HTML, CSS, and MongoDB, ensuring a responsive and user-friendly experience

Harbert College of Business Information Technology Services

August 2023 – Present

Student IT Worker

Auburn, AL

- Provided system administration support for the Harbert College of Business, assisting with the maintenance and configuration of IT infrastructure
- Diagnosed and resolved hardware and software issues for faculty and students, ensuring minimal downtime and optimal user experience

WEGL 91.1 FM

August 2021 – May 2024

Program Director

Auburn, AL

- Trained new members on radio hardware and software, enhancing technical proficiency and broadcast quality
- Optimized onboarding and training process, reducing ramp-up time and improving operational efficiency for new station members

PROJECTS

Alabama CubeSAT Initiative Satellite Software Generation

Team Lead

- Automated flightcraft software generation based on system requirements and stakeholder input to increase operational efficiency for systems engineers
- Implemented hardware and software system requirements as part of Python microservice for proprietary NASA software generation
- Designed C++ flight craft software using proprietary NASA software

Small Satellite Program CubeSAT

Embedded Systems Engineer

- Designed and developed custom PCBs to interface with satellite components, ensuring reliable electrical integration for mission-critical systems
- Researched and selected satellite hardware based on technical specifications and system requirements for ASTRA ETHEREA's Attitude Determination and Control System

Intro to Cloud Computing

Group Member

- Collaborated within a six-member team to deploy a fully functional OpenStack cloud environment for scalable computing use cases
- Automated server provisioning and configuration using Ansible and Bash scripts, enabling efficient setup and management of a distributed server network
- Managed and maintained the OpenStack deployment, configuring services to support public cloud access and ensuring high availability

ESP32 Morse Code Translator

- Developed an ESP32-based Morse code translator using C++, enabling real-time Morse-to-text conversion via serial input
- Implemented and thoroughly debugged a translation system on the ESP32, ensuring accurate signal timing, reliable I/O handling, and stable performance across various input conditions

Operating Systems

Student

- Built control functions inside OS/161 kernel with the C Programming Language to develop a working Operating System
- Debugged software implementation to ensure error free kernel operations

Digital Forensics

Student

- Performed network traffic and packet level analysis with Wireshark to identify user activities and transmitted files
- Analyzed hard drive content to extract deleted and hidden files

Cyber Threats and Countermeasures Penetration Testing

Student

- Identified security vulnerabilities in target network by analyzing host/network communication
- Penetrated target network and escalated privileges by utilizing CVEs and exploiting poor application security
- Compiled effective recommendations to prevent future exploits and secure network services