

Jacob Murrah

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Education

Auburn University

Aug 2021 - Dec 2025

B.E. in Software Engineering

GPA: 3.91/4.00

Certificates: Foundations (Odin Project), git/GitHub (Udemy), Networking (Udemy), Clean Code (Udemy), Regex (Udemy)

Skills

Programming Languages: Python, TypeScript, C++, Go, JavaScript, HTML/CSS, SQL, Bash

Technologies & Tools: git, GitHub, Angular, Docker, AWS, Google Cloud, Linux, Arduino, pytest, Cypress, Jest, RegEx

Work Experience

Adtran

Huntsville, AL

Software Engineer Co-op III

Aug 2024 - Present

- Pioneered the development of an advanced TFT touchscreen router interface by developing C++ code for an Arduino, providing critical insights that guided strategic decision-making for future product development.
- Designed and implemented a user-centric feature in Angular for one-click WiFi password resets, integrating with a Python backend API, to simplify router management and reduce support calls related to WiFi access issues.
- Optimized AWS infrastructure by removing unused Lambda functions, reducing total Lambda functions by 32.8% which contributed to cost savings and a more streamlined serverless architecture.
- Developed an Angular-based hover feature that shows users how long ago their last speed test was, with thorough Cypress testing to ensure reliability and improve user experience.

Software Engineer Co-op II

Jan 2024 - May 2024

- Accelerated teams in locating Jenkins jobs and their associated EC2 instances by creating a fully tested internal website using Python and JavaScript/HTML/CSS, supporting a smooth transition to a self-managed CI/CD environment.
- Enabled the automatic configuration of GitHub autolinks for every repository within an organization by creating a fully tested GitHub app in Python, allowing users to link to the associated story/issue in commits and PRs.
- Captured and summarized metrics of 3 internal tools, as measured by the creation of Grafana dashboards, by utilizing SQL and writing Python code and tests which facilitated data-driven decision making.
- Improved developer efficiency and command-line experience by writing fully tested custom Bash completions for the commands of an internal dependency manager tool.
- Improved 4 internal tools through feature development, issue correction, and refactoring legacy code by using Python, TypeScript, and HTML/CSS, resulting in improved tool reliability and developer experience.

Software Engineer Co-op I

May 2023 - Aug 2023

- Established and verified RADIUS server connectivity by building and configuring a testbed for RADIUS Relay, documenting the provisioning and verification steps, and developing Python tests.
- Improved test stability across GPON cards by refactoring unstable Python tests to ensure they ran and passed on various testbeds, achieving reliable testing performance.
- Ensured accurate VOIP server configuration by writing Python tests, resulting in enhanced GPON product reliability.
- Improved network documentation by drawing detailed network diagrams for 8 GPON testbeds, mapping connections to switches and ONTs, and labeling the IPs of connected devices.

Integrated Solutions for Systems (IS4S)

Huntsville, AL

Technician/Inventory Support

Jan 2021 - Aug 2022

- Accurately completed Assemblies as measured by inspections and tests, by performing tasks such as measuring, cutting, and constructing.
- Achieved quality assurance as measured by completing inspection reports, by inspecting and testing manufactured assemblies.
- Ensured efficient inventory management by placing purchased goods in designated locations and creating new spots for newly registered parts, resulting in accurate inventory tracking.
- Supported assembly operations by locating and transferring specified parts to technicians, facilitating smooth production processes.

Projects

Discord Bouncer

- Deployed a fully tested Python Discord bot to Google Cloud using Docker which utilizes Stripe payments to assign roles, enabling the Discord server owner to customize member access.

LeetCode Repetition Web Extension

- Developed a web extension to schedule repetitions of completed LeetCode problems, featuring an SQL database and a Go REST API deployed to Render using Docker, which facilitates users in technical interview preparation.

Personal Portfolio Website

- Created a personal website to showcase my experience and knowledge, hosted on GitHub Pages with a custom DNS and email, providing a professional online presence and detailed insights into my experience, projects, and skills.