# MARCUS ADAIR

801-200-9857 | marcus.a.adair@gmail.com | LinkedIn | Portfolio Lehi, Utah - US Citizen

## **EDUCATION**

• MS in Computer Science from the University of Utah

BS in Computer Science from the University of Utah

Web/Mobile Development Track Certificate

Graduated May 2025 Graduated May 2023

# **SKILLS**

• TypeScript, Python, Bash, HTML, CSS, React, React-Native, Svelte, Tailwind, AWS, Docker, APIs, CI/CD

### **WORK HISTORY**

# Junior Software Engineer at SafeStreets, UT

05/2025 - Present

- Developing a full-stack TypeScript web application with React, Next.js, and Tailwind CSS from the ground up in addition to a mobile app with React-Native and Expo for managing field technicians, appointments, inventory, etc.
- Collaborating within a large mono-repo architecture that hosts a web admin dashboard, a crossplatform mobile application, an API, and a PostgreSQL database.
- Took lead development on smaller scaler app using Svelte to create a generic UI that would respond to the data being sent to it via API and designed the API routes/service to serve order/appointments data.

## Graduate Research Assistant at Scientific Computing and Imaging Institute, UT

08/2023 - 05/2025

- Developed On-Demand Fakequakes, a full-stack web app leveraging Amazon Web Services (AWS) to launch complex earthquake simulations through a web UI, targeted for NASA and other science applications.
- Built a CI/CD pipeline with GitHub Actions to automate Docker image builds, web deployments, and Infrastructure-as-Code stack updates through AWS's Cloud Development Kit.
- Implemented an OAuth user login system so users could create accounts for running simulations with allotted credits, enhancing security and limiting Cloud cost.

## Full-Stack Software Engineer Intern at University of Oregon, OR

05/2024 - 08/2024

- Began development on Python-based web app (Plotly Dash) featuring a dashboard interface and an AWS
  Cloud Workflow to streamline and fully automate earthquake simulation software and visualize scientific data.
- Containerized the application's web dashboard and the simulation software, including dependencies, using Docker for deployment to AWS Fargate.
- Leveraged AWS technologies including Lambda, S3, Fargate, IAM, CloudFormation, and more to automate Cloud instance spawning and workflow management.

### Undergraduate Research Assistant at Scientific Computing and Imaging Institute, UT

05/2022 - 08/2023

- Designed an automatic, high-throughput simulation workflow using Python, Shell scripts, and more on the Open Science Grid (OSG), reducing time from 20+ days to < 1.5 days for 30,000+ simulations.
- Containerized software and dependencies with Singularity for running individual simulations on OSG nodes.
- Authored an 8-page research paper published by ACM and presented findings at an SC '23 workshop.

### **PROJECTS**

## Spatial Enrichment Data Engine – BS Senior Capstone Project

- Led front-end development for a geocoding web application in collaboration with Idaho National Laboratory as part of my undergraduate senior capstone project.
- Leveraged Angular/.NET stack, TypeScript, HTML, CSS, and more to implement the front-end.
- Designed Angular components, integrated Esri API library widgets for an interactive map, implemented GET requests to the backend, implemented user stories/Figma designs, and more.