

Sam Roquitte

(608) 807-9363 | sam@roquitte.com | <https://sam.roquitte.com>

Education

Georgia Institute of Technology | Atlanta GA

August 2018 – May 2022

Bachelor of Science in Computer Science, Honors: Summa Cum Laude

Experience

Blue Origin (blueorigin.com) | Seattle, WA

February 2023 - Present

Flight Software Engineer II, Blue Ring (May 2025 - Present)

- Developed a full-featured SDK delivered to external commercial payload customers enabling vehicle simulation, live telemetry, commanding, scripting, and file transfer interfaces
- Self-initiated and led all end-to-end hardware validation of payload accessory, testing GPIO, analog, and power channels against live hardware with no prior precedent on the team
- Discovered and coordinated fixes across software, FPGA, and hardware teams for multiple critical issues found
- Identified a flight binary defect that would have bricked boards from the factory and required reopening enclosures to re-stake SSDs. 48+ hour delay for two customers manifested on the first flight of Blue Ring; fix prevented the delay
- Responsible engineer for thermal subsystem software; implemented closed-loop control framework across 80+ thermal zones
- Programmatically aligned 17,000 command/telemetry mnemonics between list from systems and flight software
- Implemented 15 commands for low voltage distribution control, found issue in HIL with commands being dropped

Software Development Engineer II, New Glenn Embedded Software (Feb 2023 - May 2025)

- Led HLSR verification effort for the Main Flight Computer to support the first flight of New Glenn
- Led system-level implementation of loss of communication function to enable integrated tanking tests
- Took ownership of integrating a new hardware component including writing C++ IO device drivers
- Prototyped CBIT implementations to continuously verify that devices are working properly, wrote unit tests for PIL

Redfin (redfin.com) | Seattle, WA

July 2022 - November 2022

Software Development Engineer I, Site Reliability Engineering

Georgia Tech Space Systems Design Lab (ssdl.gatech.edu) | Atlanta, GA

Spring 2022

Undergrad Research, Ground Station Operations

- Wrote a Python application with ZMQ to connect three independent ground stations to mission operation center
- Assisted with telemetry monitoring and testbed engineering for two cubesat missions, [GT-1](#) & [Lunar Flashlight](#)

GT CS2200: Systems & Networks | Atlanta, GA

Fall 2019 - Fall 2021

Head Teaching Assistant, Fall 2020 - Fall 2021 (3 semesters)

Teaching Assistant, Fall 2019 - Spring 2020 (2 semesters)

- Built automated Python grading tools and designed projects teaching low-level systems concepts including C and assembly; hired and managed 18 TAs over 3 semesters
- Restructured team leadership by adding two lead positions, reducing errors in course deliverables

Skills

General: C/C++, Python, Bash/zsh, Jinja2, CMake, ZMQ, rti DDS

Web: Javascript, NodeJS, HTML, CSS, React, MongoDB, MySQL, GraphQL, Redis, NGINX

Platforms & Networking: Linux (Debian, RHEL), Docker, Terraform, Ansible, Jenkins, Yocto

AI/LLM Tools: Claude Code, Claude, prompt engineering

Projects

Runway (runway.samr.dev)

2025 - Present

- Built & shipped a production iOS app without prior Swift experience using Claude Code/AI-assisted development
- Developed a backend server and web scrapers to aggregate airport lounge data across major loyalty programs
- Provides pilots and travelers with real-time METAR/TAF weather and lounge information for any airport

Home Lab (hosts personal projects, portfolio)

2013 - Present

- Built up a 25U rack with custom built servers and networking equipment
- Running a microservice architecture with all services running containerized across hosts
- All services behind NGINX reverse proxy allowing for increased security with SSL certificates