Sam Roquitte

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Education

Georgia Institute of Technology | Atlanta GA   *August 2018 – May 2022*
Bachelor of Science in Computer Science
Honors: Summa Cum Laude

Experience

Redfin (redfin.com) | Seattle, WA   *July 2022 - November 2022 (layoff)*
Software Development Engineer I, Site Reliability Engineering
- Replaced a high-toil system with a system that includes tests, CI pipeline, better monitoring (statsd, Graphite, Grafana), alerting, and documentation. Reduced production errors in this service by 26%
- Investigated multiple infrastructure models, collected feedback from team to choose the best solution
- Upgraded tool built by a Tech Lead to be production ready (tests, CI, secrets in AWS for scalability)
- Joined another team's on-call rotation to support while staffing issues were present, tuned alerts to reduce load
- Tuned alerts and monitoring to identify availability issues with a third party metrics tool

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
- With my application, operators no longer need to be physically present at a ground station to uplink/downlink data, saving operators hours of travel and planning
- Assisted with telemetry monitoring and testbed engineering for two cubesat missions, GT-1 & Lunar Flashlight

Redfin (redfin.com) | Seattle, WA   *Summer 2021*
Software Development Intern, Mortgage
- Built a live status monitoring service with React, AWS Appsync, GraphQL, and DynamoDB to track outages and performance issues and display them on a live updating status page to the mortgage operations teams
- Saved an estimated 7 support requests/wk which previously required the on-call engineer to stop work to respond
- Used AppSync with DynamoDB to allow for live updates on the page (no need to refresh for updated data)

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 grading tools in Python which modify & run student code and then examine the internal processor state to ensure correct execution occurred. Provided students instant, valuable feedback and saved grading time
- Designed new projects to teach students about system architecture and networking concepts (C, assembly)
- Restructured team leadership, adding two lead positions, resulting in fewer errors in projects and homeworks
- Hired new teaching assistants each semester and managed 18 through the semester
- Conducted individual meetings with each TA to assist with personal growth and provide feedback

Skills

Languages & Frameworks: Java, C, Python, Bash/zsh, Javascript, NodeJS, HTML, CSS, PHP, React, Angular
Web Technologies: MongoDB, MySQL, GraphQL, Redis, NGINX, Apache2, AWS AppSync & DynamoDB
Platforms & Networking: Linux (Debian), Terraform, Jenkins, Kubernetes, Docker

Projects

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

Hackathon Projects:
- BuzzBasket (HackGT, 2020): **Winner: NCR 1st prize**
- HouseUP (HackGT, 2019): **Winner: Wayfair 1st prize, housing inequality**
- eL (MakeHarvard, 2019): **Winner: Sunstone prize**