

Software Engineer

Engineer with broad professional experience focusing on AWS Cloud Infrastructure, DevOps, IOT + Integrated Systems, and Project Management.

Education:

Double Bachelor of Science in Computer Science and Economics.

- Minor in Business Administration
- Graduated June 2019

Professional Experience

Software Engineer - Arcimoto Inc. (July 2019 - Current)

- Primarily focused on internal infrastructure development using AWS and CI/CD pipelines.
- Designed and implemented a Firmware Version Tracking System which links specific firmware versions for the 14 different on-vehicle modules to the unique VIN of each manufactured vehicle. Received commendations from Director of Engineering for solving this company-wide problem. My service is used throughout the company.
- Established the companies first Continuous Integration workflows. This involved developing a custom build tool that automated building and deploying code to on-vehicle modules. This saves our team hours of manual build/development time.
- Designed and implemented a company wide internal note system, designing everything from internal database structure to a frontend interface in Vue.js.
- Writing MicroPython code to add functionality to on-board vehicle module. My contributions focus on improving vehicle telematics capabilities by sending MQTT messages to a topic broker on AWS, (IOT, Lambda) and increasing overall cellular reliability by optimizing startup and I/O workloads.

Data Science Internship - M Science LLC (March 2019 - July 2019)

- Wrote Python and Apache Spark scripts to query and manipulate datasets with millions of records.
- Worked with the DataBricks API to streamline analysis processes and workflow.
- Authored extensive technical documentation.

Technical Skills

- **Languages:** Python, C, C++, Java, Javascript, C#
- **Development and Production tools:** Git, Docker, AWS (Lambda, API Gateway, EC2, CloudWatch, SNS, SQS, IOT Core), Puppet, Bash.
- **Web Standards / Frameworks:** REST APIs, GraphQL, Express, Django, Node.js, Express, Vue.js, React, SQL and NoSQL database experience.
- **Relevant Coursework:** Algorithms and Data Structures, System Architecture, Software Methodology, C/C++ and Unix, Advanced Unix System Administration, Unity Game Programming, Operating Systems, Artificial Intelligence.

Project Work

"Monopoly" Application

- An implementation of the classic board game using C++ and Qt graphics toolkit. Demonstrates proficiency in system design and programming practice
- Received full marks as an open-ended final project for C/C++ course.

"Summit Watch" Mountaineering Service

- This open source project will serve as a comprehensive mountaineering resource aggregator, intelligently ranking and sorting reports and data from around the web and using that data to provide custom mountain analytics.
- API built using Node / Express backend with a React frontend.
- Planned launch Spring 2020 @ <https://summit.watch>

"DenCity PDX" Web App

- A craigslist style application built for the inaugural 2018 PDX Hack-For-A-Cause to create a marketplace for "Urban Density Credits" in the city of Portland.
- Learned Django web framework on the fly to collaborate with a team of 2 other students and 1 professional developer to develop a working prototype with a fully functional public API in less than 24 hours.

All projects available on github.com/quinnmil