





Experience

Software Engineering Intern

Amazon Web Services (AWS IQ)

05-08/2020

- > Rebuilt email notification stack for unread chat messages or payment requests [TypeScript]
 - Created an AWS API Gateway/Lambda/SES stack (also refactored an existing AWS CloudWatch/DynamoDB/SNS/SQS system) that reliably send thousands of emails a week
- > Managed CI/CD pipelines, AWS IAM policies and roles, and AWS CloudFormation builds
- > Adhered to AppSec, and maintained 94+% unit/integration test coverage on all code reviews

Software Engineering Intern

RS Energy (acquired by Enverus)

01-08/2019

- > Promoted to lead developer of a *customer-favorite* MS-Excel chart generator
 - Big data sets are harvested from the highest-profile North American energy plays
- > Reduced a 2-hour long multi-user CSV process down to a 2-minute single-user task
 - After discovering many inefficiencies in a data pipeline, I offered to deliver a CSV uploader React/Node.js web app that eliminated 90+% of UX and data-ingest bottlenecks
- > Rebuilt a 10-year-old MS Access DBMS concurrently serving 50+ international employees
 - The redesigned system required new PostgreSQL DB tables, a Node.js microservice controller, and a React frontend [Agile tool: Jira | Build tools: Docker, Teamcity]
- Constructed ETL pipelines between MS Azure Data Lake, KineticaDB (GPU database), and AWS DynamoDB [Azkaban | Hadoop | Scala/Spark]

Assistant Coding Instructor

Discover Coding

09-12/2018

- > Taught foundations of computer science to juniors in a Montessori learning environment
- > Pair-programmed with 20 students to encourage rapid mini-project development

Projects

- > RideShare (2020) Android app allowing any driver to give rides to any rider [Android (Java)]
- > Autopilot System Software (09/2019 01/2020) for the UAARG club
 - Optimized data transfer rates from image recognition to quadcopter's onboard computer
- > <u>TouchTrack</u> (2017-2018) Android app, and desktop script system that gives a smartphone cursor control of the host PC using WebSockets [Android (Java) | Python]
 - Won the **Students' Union Award For <u>Outstanding Innovation</u>** (2018)
- > Graphing Calculator via Arduino Mega (2017) Plots general math functions on Arduino [C++]

Education

<u>University of Alberta</u> | BSc in Computer Engineering | 3.74/4.00

Class of 05/2021

- ➤ Algorithms and Data Structures [Python]; Computer Architecture [VHDL]; OOP [Java | C++]
- > Received the Jason Lang Scholarship 4 years consecutively (2016-2020)