github.com/lukedelacruz
lukedc.tech
linkedin.com/in/lukedc

Luke Dela Cruz

Software Engineer

connect@lukedc.tech
(780) 655-3476
Edmonton, AB Canada

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
- **TouchTrack** (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 Outstanding Innovation*** (2018)
- **Graphing Calculator via Arduino Mega** (2017) Plots general math functions on Arduino [*C++*]

Education

University of Alberta | 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)

References Available Upon Request — **Open to Relocate or Work Remotely**