

## Experience

**Software Engineer** [Konrad Group](#) **04/2021-Present**

- Created full-text search capabilities with Elasticsearch to provide a performant and consistent way of exploring large data sets served using GraphQL/REST APIs [*TypeScript*]
- Automated AWS cloud management using Terraform while adhering to a 97+% unit test coverage along with end-to-end integration test reporting [CI/CD: *GitLab* | *Docker* | PM: *Jira*]
- Built full-stack web applications by creating StoryBook React component libraries from UI design specifications hosted on Figma [*TailwindCSS*]

**Software Engineering Intern** [Amazon Web Services \(IQ\)](#) **05-08/2020**

- Rebuilt email notification stack for unread chat messages and payment requests [*TypeScript*]
  - Created an AWS API Gateway/Lambda/SES stack (also refactored an existing AWS CloudWatch/DynamoDB/SNS/SQS system) that reliably sends thousands of emails a week
  - Added email unsubscribe URLs (with spam filter bypass headers) to automate opt-outs

**Software Engineering Intern** [RS Energy](#) (part of [Enverus](#)) **01-08/2019**

- Reduced a 2-hour multi-user CSV validate and upload process to a 2-minute single-user task
  - After discovering many inefficiencies in a data pipeline, I offered to deliver a CSV uploader web app eliminating 90+% of UX and data-ingest bottlenecks [*Node.js* | *React*]
- Rebuilt a 10-year-old MS Access DBMS concurrently serving 50+ international employees
  - The redesigned system is a web app hosted on AWS cloud with a PostgreSQL DB, a Koa.js RESTful API middleware, and a React frontend [CI/CD: *Teamcity* | *Docker* | PM: *Jira*]
- Constructed ETL pipelines between MS Azure Data Lake, KineticaDB (GPU-driven), and AWS DynamoDB [*Hadoop* | *Scala/Spark*]

**Assistant Coding Instructor** [Discover Coding](#) **09-12/2018**

- Pair-programmed with 20 students (ages 8-12) to encourage creative mini-project development

## Projects

- [OwnMyWay](#) (2020) Lets qualified drivers earn sharing rides [*Android (Java)* | *GCP Firebase*]
- Autopilot System Software (09/2019-01/2020) for the [UAARG](#) club [*Paparazzi UAV* | *Python*]
  - 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 [Outstanding Innovation](#) award from the Students' Union (2018)
- [Graphing Calculator](#) (2017) Plots n-degree polynomial/sinusoidal charts on an Arduino [*C++*]

## Education

[University of Alberta](#) | **BSc in Computer Engineering** | **3.74/4.00** **Class of 05/2021**

- Algorithms [*C++*], deep neural net learning [*TensorFlow*], OOP [*Java*], and ICs [*VHDL* | *VLSI*]
- Received the Jason Lang Scholarship 4 years consecutively (2016-2020)