



## Brock Chelle

Software Engineer

## Contact

brocklchelle@gmail.com

## Links

[Portfolio Website](#)

[LinkedIn](#)

[Github](#)

## Industry Knowledge

Agile Methodologies

CI/CD

Distributed Systems

Microservices

Object Oriented Design

Product Leadership

REST APIs

Scalability

Systems Design

Software Documentation

Software Observability

Test Driven Development

## Education

### University of Alberta

SEPTEMBER 2017 - APRIL 2022

- Bachelor's of Computer Engineering, Specializing in Software
- GPA: 3.7/4.0
- Four-time recipient of the Jason Lang Scholarship

## Professional Experience

### Tesla, Full Stack Engineer

MAY 2021 - DECEMBER 2021

- Developed **GRPC** microservices in **Go** and **Protobuf**, and **REST APIs** in **Rails** in a production environment that receives over 1 million requests every day.
- Improved the performance of several high-volume endpoints by over 95% using **Sidekiq** for background job processing and **Redis** for caching.
- Wrote unit, and integration tests with **RSpec**, **Ginkgo**, and **Enzyme** to follow the principles of Test Driven Development.
- Automated testing, building **Docker** images, and deploying to **Kubernetes** using **Concourse**.
- Added logging and monitoring dashboards with **Splunk** and **Grafana** which gave our team insights into performance and potential issues.
- Took leadership in the development of key security features for an identity and access management platform used by over 10,000 employees.
- Implemented over 50 features and fixes across 3 front-end applications in **React** and **Javascript**

### Willowglen Systems, Software Engineer

JANUARY 2020 - SEPTEMBER 2020

- Developed a back-end application with **C++**, **MariaDB**, and **Redis** used to save the lives of metro-rail track workers.
- Created a front-end application with **JQuery**, **HTML**, and **CSS**, which compiles reports for safety and system accuracy.
- Led multiple company update meetings with 30+ attendees, resulting in company-wide clarity regarding each active project's status.

## Personal Projects

### CollaboGreat - Full Stack App

- Developed an internal REST API with **Node** and **Express** to handle client requests and perform CRUD operations on a **MongoDB** Database.
- Implemented user authentication using the **OAuth** protocol, allowing users to authenticate with their existing Facebook, Google, or Github accounts.
- Created a front-end Single-Page Application with **React**, **Redux** and **Material**.
- Utilized **Digital Ocean** as a cloud provider to host the API with **NGINX**.

Live Demo: <https://collabogreat.brockchelle.com>

### KeepIt, Mobile iOS App

- Developed an **iOS** application with **Swift** that helps users track their items.
- Used **Firebase** for authentication, cloud storage, and storing user information.
- Currently has over 1000+ App Store downloads and 0 crashes to date.

Live Demo: <https://apps.apple.com/ca/app/keepit-item-tracker/id1474698806>

## Volunteering & Leadership

### Google Developer Student Group, Technical Lead

SEPTEMBER 2020 - APRIL 2021

- Mentored early-year computer science and software engineering students at my university.
- Organized events and workshops that provided valuable learning opportunities for our members.
- Provided feedback and guidance for several projects in the Google Developer Student Group Solutions Challenge.

## Technical Skills

- **Languages:** Go, Ruby, Typescript, Javascript, Python, C/C++, HTML, CSS.
- **Libraries/Frameworks:** Rails, React, Node, Express, RSpec, Ginkgo, Enzyme.
- **Databases:** MySQL, SQLite, MongoDB, Redis, Firebase.
- **Tools:** Git, Docker, Kubernetes, Proto, GRPC, Concourse, Splunk, Grafana.