Brock Chelle

Portfolio Website | LinkedIn | GitHub | brocklchelle@gmail.com | 780-691-9876 | Edmonton, Canada

Work Experience

Tesla, Palo Alto, USA (Remote)   May - December 2021
Full Stack Engineer Intern
- Developed **GRPC** microservices in **Go** and **Protobuf**, **REST API**s in **Rails**, and UIs with **React** and **Javascript** in a production environment used by over 1,000,000 customers every day.
- Improved the performance of several high-volume endpoints by utilizing background job processing tools like **Sidekiq** and **Kafka**, and caching with **Redis**.
- Wrote unit, integration, and end-to-end tests with **RSpec**, **Ginkgo,** and **Enzyme** with every commit I made.
- Automated testing, building **Docker** images, and deploying to **Kubernetes** using **Concourse**.
- Added logging and monitoring dashboards with **Splunk** and **Grafana** which allowed our team to measure performance and quickly identify issues for critical endpoints.
- Took leadership in the development of key security features for an identity and access management platform used by over 10,000 employees.

Willowglen Systems Inc, Edmonton, AB   January - September 2020
Software Engineer Intern
- Developed a backend application with **C++** 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.
- Designed and Implemented several front-end components with **ExtJS** for a client upgrade project; these new components were approved and applauded by the client.
- Led multiple company update meetings with 30+ attendees, resulting in company-wide clarity regarding each active project's status.

Personal Projects

CollaboGreat - Team Collaboration
Full-Stack Web Application
- Developed an internal **REST API** with **NodeJS** 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 UI**.
- Hosted the API on Digital Ocean with **NGINX** web server.

    Live Site: https://collabogreat.brockchelle.com

KeepIt - Item Tracker
iOS Application
- Developed an **iOS** application with **Swift** that helps users keep track of their belongings.
- Used **Google Firebase** for authentication, cloud storage, and storing user information.
- Implemented the **MVC** design pattern to separate the UI from the data.
- Currently has over 1000+ App Store downloads and 0 crashes to date.

    App Store URL: https://apps.apple.com/ca/app/keepit-item-tracker/id1474698806

Education

University of Alberta, Edmonton, AB   September 2017 - April 2022
Computer Engineering - Software, BSc
GPA: 3.7/4.0

Computer Experience & Skills

Languages: Go, Ruby, Typescript, Javascript, Protobuf, Rust, C/C++, Swift, Python, Java, HTML, CSS.
Libraries & Frameworks: Rails, React, JQuery, NodeJS, Express, SASS.
Databases: MySQL, SQLite, MongoDB, Redis, Firebase.
DevOps: Git, Docker, Kubernetes, Concourse, Splunk, Grafana.
Operating Systems: Windows, Ubuntu, macOS.