Brock Chelle

Software Engineer

Contact

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780-691-9876

Links

- Github
- LinkedIn
- Portfolio Website

Industry Knowledge

Agile Methodologies

CI/CD

Computer Networking

Distributed Systems

Microservices

Objected Oriented Design

Product Leadership

REST APIs

Scalability

Software Documentation

Software Observability

Systems Design

Test Driven Development

Professional Experience

DigitalOcean, Software Engineer II
SEPTEMBER 2022 - FEBRUARY 2023 (LAYOFFS)

- Developed **gRPC** endpoints in **Go** and **Protobuf** to collect metrics on wasted IP Addresses, and identify top consumers of IP Addresses.
- Safely deployed and backfilled a **MySQL** integration for a critical service and deprecated the legacy datastore once the transition was complete.
- Improved **Prometheus** alerting coverage for a critical service to eliminate false-positive alerts and reduce mean time to detection below 10 minutes.
- Created **Grafana** dashboards to help the company track IP Address usage across all 15 of our data centers.
- Wrote and maintained unit, integration, and smoke tests with **Go**, following the principles of Test Driven Development.

Tesla, Software Engineer
MAY 2021 - SEPTEMBER 2022

- Developed **gRPC** microservices in **Go** and **Protobuf**, and **REST APIs** in **Rails** in a production environment that receives millions of requests every day.
- Improved the performance of several high-volume endpoints by over 95% by using **Sidkiq** for background job processing and **Redis** for caching.
- Made significant improvements to applications used in service centers worldwide that saved the company $100,000 in lost time per month.
- Automated testing, building **Docker** images, and deploying to **Kubernetes** using **Concourse**.
- Added logging and monitoring dashboards with **Splunk**, **Grafana**, and **Prometheus**, giving our team insights into performance and potential issues.
- Took leadership in the development and administration of an identity and access management platform used by over 10,000 employees daily.
- Implemented over 50 features and fixes across three 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** to record and analyze geospatial data to detect inaccuracies that would lead to a potential system failure.
- Created a front-end application with **JQuery**, **HTML**, and **CSS**, which compiles reports for safety-related metrics that our clients can use to prevent incidents.
- Led multiple company update meetings with 30+ attendees, resulting in company-wide clarity regarding each active project's status.

Education

University of Alberta

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

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 and authorization using the **OAuth** protocol, allowing users to authenticate with their existing Google or GitHub accounts.
- Created a front-end application with **React**, **Redux**, and **Material UI**.
- Utilized **DigitalOcean** as a cloud provider to host the API with **NGINX**.

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.

Volunteering & Leadership

Google Developer Student Group, Technical Lead
SEPTEMBER 2020 - APRIL 2021
- Mentored first and second-year computer science and software engineering students at the University of Alberta.
- Organized events and workshops that provided valuable learning opportunities to our members.
- Provided technical feedback and guidance for several projects in the Google Developer Student Group Solutions Challenge.

Technical Skills

Languages: Go, Ruby, Typescript, Javascript, Java, Python, C/C++, HTML, CSS
Libraries/Frameworks: Rails, React, Node, Express, RSpec, Gingko, Enzyme
Databases: MySQL, SQLite, MongoDB, Redis, Firebase
Tools: Git, Docker, Kubernetes, Prometheus, gRPC, Concourse, Splunk, Grafana