

# BRANDON ZHOU-CHARLES

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## WORK EXPERIENCE

### FULL-STACK SOFTWARE ENGINEER

Rewind, Ottawa, ON July 2020 - Present

- Refactored legacy Stripe and Shopify billing code into Service Objects to remove code duplication and improve unit test coverage using **Ruby** and **RSpec**.
- Created a global navigation drawer using **React** and **Rails** to help cross-sell different products for various platforms the company supports.
- Implemented the storing of request and response data from API calls to 3rd parties using **AWS Lambda** to parse data and **S3** to store the data.
- Automated restoring of backed-up Intuit data using **Sidekiq** and **Ruby** to remove the need for manual effort.
- Created a Trello power-up to allow users to use our application within an iframe by exposing and securing various API endpoints required for authorization.
- Updated the Shopify API gem and resolved all breaking changes within our application with zero downtime.
- Standardized logging and error across our application by creating a **Ruby** gem to house logging levels and logic, and defining actions to occur at various logging levels.

### SOFTWARE ENGINEER CO-OP

PagerDuty, Toronto, ON May 2019 - August 2019

- Provisioned an **AWS Memcached** instance using **Terraform** to persist the learner models so that the learner would not have to re-create new models from scratch on service restart.
- Proposed and implemented a disaster recovery plan using feature toggles to launch our service and migrate users from v1 to v2 without disruption.
- Spearheaded developing a timeline component for users to view a list of related incidents using **React** and **Redux**.

### DEVOPS ENGINEER CO-OP

Royal Bank of Canada, Toronto, ON September 2018 - April 2019

- Created a suite of **Ansible** roles to provision iOS, Android, and NPM build servers allowing for the task to be automated and run in 2 hours instead of 8 hours of manual effort.
- Migrated build pipelines onto a team-internal instance of **Cloud Jenkins** to allow the team to have complete autonomy over the configuration of Jenkins.
- Created iOS build pipelines using **Fastlane** to automate building the application and sending it for approval

## SKILLS

### LANGUAGES

Node.js, TypeScript, JavaScript, Java, Elixir, Python, Ruby

### WEB DEV

React, Redux, Rails, Angular, SCSS, Express, Phoenix, GraphQL

### GENERAL

Git, AWS, Terraform, Ansible, Jenkins, Docker, Kubernetes, Sidekiq, DataDog, MongoDB, Firebase, Heroku, ELK stack

## PROJECTS

### ICARUS

Stock and cryptocurrency sentiment analysis tool built using **Docker**, **Node.js**, **Express**, **React**, and **MongoDB**. Used **Server-Sent Events** for one-way event streaming from server to client to update users as new data came in.

### CRWN CLOTHING

E-commerce application built using **React**, **Redux**, **Node.js**, **Stripe API**, and **Firebase**. Featured **OAuth** authentication, cart manipulation, and the ability to checkout your cart.

### HALP CLI

**Node.js** CLI tool to help query the web for coding answers so terminal enthusiasts never have to open a browser. Featured code syntax highlighting, paragraph stylings, and parsing of StackOverflow or Medium answers.

## EDUCATION

### BACHELOR OF SOFTWARE ENGINEERING

University of Victoria

September 2014 - April 2020