

# Rui Zhu

ciguatera.z.rui@gmail.ca | zrui.dev

## SKILLS

---

<b>Languages</b>	Java, JavaScript, Python, Kotlin, TypeScript, Bash, SQL, Golang
<b>Frameworks</b>	Spring Boot, React/Redux, VueJS/Vuex, NodeJS, Spring, JUnit, Jest, Wiremock, JQuery
<b>Tools</b>	git, docker, SVN, nix

## WORK EXPERIENCE

---

### Software Engineer Intern

May 2020 – Aug 2020

*Capital One*

*Toronto, ON*

- Implemented new features in application for service agents written in VueJS/Vuex front end
- Created asynchronous Vuex store mutations and actions for populating store with data
- Debugged performance issues with Components, increasing load speed by 50%
- Created new endpoints in RESTful NodeJS API serving data to front-end
- Wrote Unit Tests with Mocha and Jest, maintaining 100% code coverage

### Software Engineer Intern

May 2019 – Aug 2019

*Capital One*

*Toronto, ON*

- Upgraded RESTful API from Spring 4 to Spring Boot 2, improving code maintainability and currency
- Added performance increasing modifications such to object pooling for encryption/decryption classes
- Implemented new endpoints in API backend to improve usability
- Created unit tests and integration tests using Wiremock, embedded H2 DB, and Mockito, getting 100% code coverage
- Maintained existing tools like ATDD test suite with Cucumber

### Front End Developer Intern

Sept 2018 – Dec 2018

*Ross Video*

*Ottawa, ON*

- Implement new features for customers such as an HTML5 video player
- Wrote Java upgrade scripts for version changes within the product that would update the database schema
- Improved UX on touchscreen devices by fixing library compatibilities with touch.js
- Increased code coverage to 100%

### Software Test Engineer Intern

May 2018 – Aug 2018

*Gemalto*

*Ottawa, ON*

- Wrote performance testing scripts using python and java to automate retrieval of data into various formats (xml, csv)
- Used SQLAlchemy ORM to efficiently query and filter from data set with 20,000+ rows
- Created a web app using JQuery to run and display comparisons between data sets, improving website usability

### Teaching Assistant

Sept 2017 – Dec 2019

*Carleton University*

*Ottawa, ON*

- Helped students understand bugs with their code by running through their code with them
- Explained to students various design patterns and data structures/algorithms in Java/Python

## PROJECTS

---

### fserv

#### Golang, PostgreSQL

- Go app w/ imgur style file name shortening used for self hosting images/files
- Implements JWT authorization
- Serves simple, light HTML website

### Matrix Calculator

#### React, Redux, TypeScript

- React SPA that performs matrix operations such as RREF, Transpose, Multiply
- Uses math.js for experimental symbolic algebra support

## EDUCATION

---

### Carleton University

Sept 2016 – Dec 2020

*B. Computer Science, 10.7/12 CGPA (3.8/4.0)*

*Ottawa, ON*