

# Rui Zhu

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## SKILLS

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

## WORK EXPERIENCE

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### Software Engineer Intern

Capital One

May 2020 – Aug 2020

Toronto, ON

- Implemented new features in application for service agents written in VueJS/Vuex front end
- Performed Accessibility testing on web application, and documented/fixed issues
- 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

Capital One

May 2019 – Aug 2019

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
- Created unit and integration tests using Wiremock, H2 DB, and Mockito, getting 100% code coverage
- Maintained existing tools like ATDD test suite with Cucumber

### Front End Developer Intern

Ross Video

Sept 2018 – Dec 2018

Ottawa, ON

- Implement new features in Javascript/Jquery application such as video players and login groups
- Added UX features for touchpad devices

### Software Test Engineer Intern

Gemalto

May 2018 – Aug 2018

Ottawa, ON

- Wrote performance testing scripts using python and java to automate retrieval of data (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 usability

### Teaching Assistant

Carleton University

Sept 2017 – Dec 2019

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

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### kimosabe

#### Spring Boot, React/Redux, PostgreSQL, Redis/Redisearch

- Social application for finding buddies to play games with, similar to forum style
- Uses IGDB API cached in Redis, and Redisearch for searching for games
- Ability for users to join/create/moderate groups, add friends, post in subgroups.

### fserv

#### Golang, PostgreSQL

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

### 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

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### Carleton University

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

Sept 2016 – Dec 2020

Ottawa, ON