

# Rui Zhu

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## SKILLS

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<b>Languages</b>	Java, JavaScript, Python, Kotlin, TypeScript, Bash, SQL, Golang
<b>Frameworks</b>	Spring Boot, React, Vue JS, 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*

- Created new endpoints in RESTful API serving data to front-end
- Implemented new features in application for telephone agents written in VueJS 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
- 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 environment with Cucumber

### Front End Developer Intern

*Ross Video*

Sept 2018 – Dec 2018

*Ottawa, ON*

- Implement new features for customers such as a video player
- Wrote Java upgrade scripts for version changes within the product that would update the database
- Improved UX on touchscreen devices by fixing library compatibilities with touch.js

### Software Test Engineer Intern

*Gemalto*

May 2018 – Aug 2018

*Ottawa, ON*

- Wrote performance testing scripts using python and java to automate retrieval of data into various formats (xml, csv)
- Wrote queries using SQLAlchemy to communicate with PostgreSQL database
- Created a web app using JQuery to run and display comparisons between data sets, improving website usability
- Computed statistics from data sets, which were then sent to the front end through a Flask route

### 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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### fserv

#### Golang, PostgreSQL

- Go app w/ imgur style file name shortening used for self hosting images.
- 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

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### Carleton University

*B. Computer Science, 10.65/12 CGPA*

Sept 2016 – Dec 2020

*Ottawa, ON*