

# Kevin Ding

UNIVERSITY OF WATERLOO - 2B COMPUTER SCIENCE

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## Skills

<b>Languages</b>	JavaScript, Python, C, C++, HTML/CSS, SQL, Racket
<b>Frameworks/Libraries</b>	React.js, Redux, Node.js, Express.js, Jest, Enzyme, Django
<b>Tools/Technologies</b>	Git, PostgreSQL, MongoDB, Postman, Selenium, Puppeteer, JIRA, Netlify, Heroku

## Experience

### The Co-operators Group Ltd.

Kitchener, ON

FULL STACK SOFTWARE DEVELOPER

Jan 2021 - Apr 2021

- Redesigned an internal server migration and currency tracking web portal in a small **Agile** team, using **React/Redux** on the front-end, with **Node.js**, **Express**, and **MongoDB** on the back-end
- Improved application performance by refactoring to use server-side pagination, reducing load times by **80%**
- Created a request manager to ensure asynchronous API calls returned responses in a predictable order
- Increased code reuse by developing an auto logout higher-order component
- Developed and maintained unit tests using **Jest**, **Enzyme**, and **SuperTest**

### SAP Canada Inc.

Waterloo, ON

QUALITY ENGINEERING AUTOMATION DEVELOPER

May 2020 - Aug 2020

- Conducted exploratory and automated testing on GUI tools for SAP HANA (Cockpit and HRTT)
- Developed and maintained automation test cases using **Python**, **Selenium**, and **HANA SQL**
- Reviewed automation test results for failures and logged related issues to **JIRA** and the **Quality Management System (QMS)**
- Worked with product developers to reproduce bug reports and verify bug fixes
- Developed a **Chrome extension** to add client side functionality to QMS, speeding up the automation verification process

## Projects

### Graphic Novel Reader

GitHub 

Front-end comic reading client for the MangaDex API with **300+ users**

Feb 2021 - Present

- Designed and developed a responsive, mobile first single page application using **React/Redux** and **Material-UI**
- Created custom hooks for data fetching to easily adapt to breaking changes in the external API
- Implemented **full text searching** of over **50,000** comic entries in **PostgreSQL**
- Optimized searches by storing a text searchable vector column and creating a GIN index, reducing average execution time from over **5 seconds** to less than **100ms**
- Deployed the front-end to **Netlify** and the back-end to **Heroku**

### Weddit

GitHub 

News aggregation and discussion website very similar to Reddit with **50+ stars**

Mar 2021 - Present

- Developed a Reddit clone using **React/Redux**, **Chakra UI**, **Node.js**, **Express**, and **PostgreSQL**
- Created a recursive **React tree component** to support nested comments and conversation threading
- Performed **RESTful API** requests and data fetching with **Redux** and **Redux Thunk**
- Increased code reuse and cohesion by using a separate reducer to handle loading and error states
- Designed a **PostgreSQL** database schema for storing posts, comments/replies, and upvotes
- Implemented **JSON web token** based authentication with support for multiple sessions using custom Express middleware

## Education

### University of Waterloo

Waterloo, ON

CANDIDATE FOR BACHELOR OF COMPUTER SCIENCE

Sept 2019 - Present

- Term Dean's Honours List Fall 2019, Winter 2020, Fall 2020 (3.93 cGPA)
- Recipient of the Waterloo County Entrance Scholarship (\$4000) & President's Scholarship (\$2000)