

# Kevin Ding

UNIVERSITY OF WATERLOO - 2B COMPUTER SCIENCE

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## Skills

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

## Experience

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### 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 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**
- Effectively worked within a small team following an **Agile** workflow

### 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

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### Graphic Novel Reader

[source code](#)

Front-end comic reading client for the MangaDex API

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

### Reddit Clone

[source code](#)

Social news and discussion website very similar to Reddit

Mar 2021 - Present

- Developed a functional clone of Reddit using React/Redux, **Chakra UI**, **Node.js**, **Express**, and PostgreSQL, deployed to **Netlify** and **Heroku**
- Designed a **PostgreSQL** database schema for storing posts, comments/replies, and upvotes
- Created a recursive **React** tree component to support nested comments and conversation threading
- Utilized **Redux** with **Redux Thunk** for handling API requests and data fetching
- Implemented JSON web token based user authentication with support for multiple sessions

## Education

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### University of Waterloo

Waterloo, ON

CANDIDATE FOR BACHELOR OF COMPUTER SCIENCE

Sept 2019 - Present

- Term Dean's Honours List, Fall 2019, Winter 2020 (3.9 cGPA)
- Recipient of the Waterloo County Entrance Scholarship (\$4000) & President's Scholarship (\$2000)