

University of Waterloo - 3A Computer Science

□ (519) 729 0288 | ≥ k24ding@uwaterloo.ca | ★ tacticaltofu.qithub.io | ⊙ qithub.com/tacticaltofu | ☐ linkedin.com/in/ding-kevin/

Skills

Languages Python, JavaScript, C++, C, SQL, HTML/CSS

Frameworks/Libraries Flask, React, Redux, Node.js, Express, Jest

Tools/Technologies PostgreSQL, MongoDB, Snowflake, Docker, Postman, Selenium, Netlify, Heroku, JIRA, Git

Experience

Snapcommerce (previously Snaptravel)

Toronto, ON

SOFTWARE ENGINEER INTERN

Sept 2021 - Dec 2021

- Developed core features for a new digital wallet service using Python, Flask, PostgreSQL, and Protocol Buffers
- Built endpoints supporting over 20 real-time push notifications, working with third-party provider webhooks
- Created data syncs using Hightouch, dbt, and Snowflake to segment users based on activity history
- Integrated Finicity and TokenEx APIs into existing user flows to detect fraud and ensure application security
- Improved application monitoring by 30%, logging key events to Amplitude, Datadog, and Slack

The Co-operators Group Ltd.

Kitchener, ON

FULL STACK SOFTWARE DEVELOPER INTERN

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 in JavaScript to ensure asynchronous API calls returned responses in a predictable order
- Developed unit tests using Jest, Enzyme, and SuperTest to increase code coverage by 40%

SAP Canada Inc. Waterloo, ON

QUALITY ENGINEERING AUTOMATION DEVELOPER INTERN

May 2020 - Aug 2020

- Built a **Chrome extension** to add client side functionality to the Quality Management System, **speeding up** the automation review process **by 15 minutes** every day
- Developed and maintained automation test cases for SAP HANA Cockpit and HRTT using Python and Selenium

Projects

MangaStack

GitHub 🗹

Web based comic reader for the MangaDex API with 40,000+ lifetime page views

Feb 2021 - Jul 2021

- Achieved over 300 daily users in May and June 2021
- Implemented and optimized **full text searching** of over **50,000** comic entries in **PostgreSQL**, reducing average execution time from over **5 seconds** to less than **100ms**
- 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

Weddit

GitHub 🗹

Mar 2021 - May 2021

News aggregation and discussion website very similar to Reddit with **80+ stars** on GitHub

- 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
- 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

Education

University of Waterloo

Waterloo, ON

Sept 2019 - Present

CANDIDATE FOR BACHELOR OF COMPUTER SCIENCE

- Cumulative Average: 90%, Major Average: 92%, GPA: 3.9/4.0
- Recipient of the Waterloo County Entrance Scholarship (\$4000) & President's Scholarship (\$2000)