Kevin Ding

University of Waterloo - 3A Computer Science

(519) 729 0288 | k24ding@uwaterloo.ca | tacticaltofu.github.io | github.com/tacticaltofu | linkedin.com/in/ding-kevin/

Skills

Languages	Python, JavaScript, C++, C, SQL, HTML/CSS
Frameworks/Libraries	Flask, React.js, Redux, Node.js, Express.js, Jest
Tools/Technologies	Git, Docker, PostgreSQL, MongoDB, Snowflake, Postman, Selenium, Netlify, Heroku

Experience

Snapcommerce (previously Snaptravel)   Toronto, ON
SOFTWARE ENGINEERING INTERN, BACKEND   *Sept 2021 - Dec 2021*

- Developed core features for a digital wallet service using **Python** and **Flask**
- Built endpoints for third-party provider **webhooks** to support real-time push notifications
- Wrote **SQL** queries and created **dbt models** in **Snowflake** to segment users based on transaction history
- Improved application monitoring by logging key events to **Amplitude**, **Datadog**, and **Slack**

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*

- Developed and maintained automation test cases for SAP HANA Cockpit and HRTT using **Python** and **Selenium**
- Reviewed automation test results for failures and logged related issues to **JIRA** and the **Quality Management System (QMS)**
- Developed a **Chrome extension** to add client side functionality to QMS, speeding up the automation verification process

Projects

MangaStack   GitHub ⧉
Web based comic reader for the MangaDex API with **10,000+ lifetime users**   *Feb 2021 - Jul 2021*

- 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**
- Achieved **over 300 daily users** in May and June 2021

Weddit   GitHub ⧉
News aggregation and discussion website very similar to Reddit with **80+ stars** on GitHub   *Mar 2021 - May 2021*

- 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

Education

University of Waterloo   Waterloo, ON
CANDIDATE FOR BACHELOR OF COMPUTER SCIENCE, 90.1% CUMULATIVE AVERAGE   *Sept 2019 - Present*

- Recipient of the Waterloo County Entrance Scholarship ($4000) & President's Scholarship ($2000)