# **OWEN WANG**

## **EDUCATION**

# **University of Waterloo**

Waterloo, ON

Bachelor of Computer Science Honours, Co-op

Expected May 2028

#### SKILLS

Languages: Python, Java, JavaScript, TypeScript, C, SQL, HTML, CSS, Sass

**Libraries and Frameworks**: Django, Django REST framework, React, Tailwind CSS, Bootstrap **Development Tools**: Git, Linux/UNIX, PostgreSQL, SQLite, RabbitMQ, Docker, Amazon S3

## **PROJECTS**

**Brook** | Python, Django, Django REST framework, React, TypeScript, Tailwind CSS, PostgreSQL, RabbitMQ, Amazon S3

- Developed a full-stack SPA allowing music downloads and playlist management for YouTube and Spotify
- Designed a interactive and dynamic UI with React, Tailwind, and daisyUI, utilizing client-side rendering (CSR)
- Built a back-end to handle **session-based user authentication** with Django, and a **RESTful API** for seamless front-end communication and **CRUD** operations with the Django REST framework
- Designed and implemented a normalized relational database with Postgres and the Django ORM
- Utilized RabbitMQ with the Celery library to offload downloads to a background worker
- Leveraged Amazon S3 to handle file storage of downloaded songs and playlists
- Integrated YouTube Data and Spotify Web APIs to manage music info and detect changes in user playlists
- Deployed frontend to Netlify and backend to Heroku while managing dependencies and configuring CORS and cookies, enabling secure cross-domain communication for API requests and responses

## JBKR Mobile | Java

- Developed a Java desktop application simulating a stock trading application, enabling users to create and manage stock profiles with real-time data from the NYSE and Nasdaq
- Led a team of three, facilitating role assignments and conducting pair programming sessions
- Integrated real-time stock market data from the YahooFinance API

# **Multithreaded Local Superchat** | C

- Developed a chat app that connects over a users local network using TCP sockets
- Implemented multithreading to manage concurrent message handling
- Optimized dynamic memory allocation to support an expanding user base

# **Internsheet** | React, TypeScript, Tailwind CSS, Supabase

- Developed a dynamic responsive single-page application to track job applications
- Leveraged Supabase's realtime Postgres changes to update spreadsheet

## wangowen.com | React, TypeScript, Tailwind CSS

- Developed a responsive portfolio single-page application
- Deployed from GitHub to Netlify while adhering to responsive design principles to allow for a seamless experience for both **mobile** and **desktop** users

## LEADERSHIP

# **CU Esports Officer**

Sept 2023 – Present

Ottawa, ON

Carleton University

- Fostered a community of **3200+ members** by organizing weekly online gaming events at Carleton University, providing a platform for competitive and social engagement
- · Collaborated with admins to ensure smooth execution and student satisfaction during events

# **Coding Club Homework Assistant**

Sept 2022 - June 2023

A.Y. Jackson S.S. Toronto, ON

- Guided a club of 300+ students through identifying and debugging coding errors while conducting code reviews
- Mentored individual students through computer science coursework, offering insights on proper coding practices