# OWEN WANG

#### **EDUCATION**

## **Carleton University**

Ottawa, ON

Bachelor of Computer Science Honours (Co-op) — GPA: 3.99/4.0

Expected May 2028

#### **SKILLS**

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

Libraries and Frameworks: Django, Django REST framework, React, Tailwind CSS, Bootstrap, Celery, Boto3

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 and Tailwind CSS, 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 using the Django REST framework
- Designed and implemented a normalized relational database with PostgreSQL and the Django ORM
- Utilized RabbitMQ with the Celery library to offload downloads to a background worker
- Optimized file storage by utilizing Amazon S3 through the Boto3 library
- 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 to enable secure cross-domain communication for API requests and responses

# 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

#### The Wildfire Network | Python, Django, HTML, CSS, Sass, Bootstrap

- Developed a **full-stack web app** providing latest news and data on Canadian wildfires and a custom wildfire prediction algorithm during Ignition Hacks 2023
- Guided and mentored a team of three, conducting comprehensive code reviews to ensure project coordination
- Designed an algorithm using data from WeatherAPI to measure wildfire risk in any given area

# 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 Chat App** | *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

#### EXTRA-CURRICULARS

#### **CU Esports Officer**

Sept 2023 – Present

Carleton University Ottawa, ON

 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