Fangda Dai

+1 (506) 227-0180 | fdai@uwaterloo.ca | fangdadai.github.io/portfolio | in linkedin.com/in/fangdadai/

Summary of Qualifications

Technical Skills

- Languages: C++, Python, JavaScript, TypeScript, HTML5, CSS, SQL, C, Java, R, Bash
- Technologies: Git, React.js, Node.js, Tailwind CSS, MySQL, Azure, Linux, Vite.js, Kivy
- Certificates: Azure AI Fundamentals, Azure Fundamentals

Work Experience

Application Developer   May 2023 – Aug 2023
Chongqing Yuntian Robot Technology Co., Ltd.   *Remote*

- Developed a mobile app GUI for a start-up company using **Kivy** and **KivyMD** frameworks in Python, which provides an e-commerce platform for aviation commodities
- Implemented sign-up functionality with email activation for security and recorded valid registrations in **MySQL** database
- Implemented a user log-in system, leveraging SQL queries for interaction with the database to authenticate users based on entered email/password

Instructional Support Assistant   May 2024 – Aug 2024
University of Waterloo   *Waterloo, ON*

- Worked with professors to deliver CS246, an object-oriented programming course in C++ with over **250** students.
- Created and maintained bash/python scripts to automatically test student submissions.
- Enhanced communication and problem-solving skills by conducting weekly tutorial sessions, addressing student inquiries during in-person office hours, and coordinating a group of **8** graduate teaching assistants for assignment grading.
- Organized and taught 2-hour review sessions before the midterm and final exams, engaging over **100** students in each session.

Projects

Portfolio Website (fangdadai.github.io/portfolio)   Dec 2023

- Designed a portfolio using React.js, JavaScript, and Tailwind CSS
- Implemented a **responsive** design with Tailwind CSS and added animation using Framer Motion library to improve the UI/UX design
- Deployed the website to Github Pages by modifying the Github workflow permissions

RAllnet   Nov 2023

- Developed a **2-player** (each with 8 pieces), turn-based strategy board game using C++
- Developed text-based and graphical interfaces (using X11/Xlib API) for user interaction
- Applied design patterns such as observer pattern and decorator pattern to update the gameboard after each move and add abilities to pieces at run-time
- Presented a **30-minute** demo to teaching assistants and received **perfect score**

Education

University of Waterloo | Honours Bachelor, Computer Science   Sept 2022 – Present

- Recipient of President's Scholarship and International Entrance Scholarship (**$7,000**)
- **Relevant Coursework**: Algorithm Design, OOP development, and User Interface

Extracurricular Experience

Boys and Girls Club Staff Assistant   Jun 2021 – Sept 2021
Moncton, NB

- Supervised a diverse group of **25** youths and teenagers, **aged 6 to 15**
- Led and organized recreational activities and educational workshops for children