

Kevin Zhu

647-323-3233 | k4zhu@uwaterloo.ca | [linkedin.com/in/kevin-zhu](https://www.linkedin.com/in/kevin-zhu) | github.com/zks10 | [My Website](#)

TECHNICAL SKILLS

Languages: Python, SQL, TypeScript, C/C++, Java, MIPS, AWS, HTML/CSS

Libraries: Angular, React, Fast API

Developer Tools: Git, Linux, MySQL, PostgreSQL, VS Code, Clion, Eclipse, Spyder, Microsoft Package, TestFlight

EDUCATION

University of Waterloo

Waterloo, ON

Bachelor of Honours Mathematics - Combinatorics and Optimization, Computing Minor September 2022 – Present

- University of Waterloo President's Scholarship of Distinction
- Current available work terms: January 2025 April 2025 September 2025 January 2026

EXPERIENCE

Full Stack Developer

April 2024 - Dec. 2024

Safuture Inc

Burlington, ON

- **Extensive experience building feature-rich, responsive websites** using **Angular** and **React**, tailored for **enterprise clients**. Skilled in **integrating complex functionalities**, enhancing **user interfaces**, and **optimizing component performance** to create **high-quality, scalable web applications**.
- **Skilled in building robust, high-performance APIs** using **FastAPI**, enabling seamless communication between **frontend applications** and **backend services**. Experienced in designing **scalable, RESTful endpoints** to support complex features, including **OpenAI integrations**, and enhancing **mobile functionality** across **iOS platforms**.

Software Developer / Data analysis

Sept. 2023 – Dec. 2023

Environment Climate Change of Canada

Cornwall, ON

- **Led the creation of a database**, organizing a multitude of files into relational tables with directed the development of scripts for **downloading and extracting data from CSV, JSON, and TXT files**, Enhancing data accessibility and analysis efficiency, facilitating impactful decision-making.
- Implemented IJC's test pages with **RSS integration**, aiding colleagues in promptly accessing new information.

Vice President of Finance in Residence Consil

April 2023 – Aug. 2023

University of Waterloo

Waterloo, ON

- Oversee all aspects of budget management and financial operations for the residence community, involves **developing and monitoring budgets**, **analyzing financial data**, and **providing recommendations for efficient resource allocation** and **cost-saving opportunities**.

PROJECTS

Great Lake Database | *Python, SQL, PostgreSQL, Jupiter notebook, Anaconda*

Sept 2023

- Established a **PostgreSQL cloud database** to systematically store weather and hydrology data from NOAA and MEDS **spanning 1980 to the present** for the Great Lakes region. This streamlined system adeptly handles **thousands** of files, facilitating rapid extraction and utilization of data for seamless research and analysis.
- Collected and analyzed gigabytes of high quality weather data using Python **NumPy** on **Jupyter Notebook**, transferring the information into a SQL database while reducing future data computation time by 73%

CC3k-Simulation Shawdownmaze | *CPP, Linux, GitHub*

Aug 2023

- Offered players the opportunity in a simplified rogue-like game where players explore a dungeon, battle enemies, collect treasure, and progress through floors, all while enriching the immersive gameplay experience.
- Employing various techniques such as **shared pointers**, **polymorphism**, **inheritance**, and the **Model-View-Controller (MVC) pattern**, ensured a modular, high flexibility maintainable program.

ACHIEVMENTS

First Place in UForse Datathon

April 2021

- The Datathon focused on collecting data and analyzing COVID-19 issues and presented findings to a panel of judges, passing through **two rounds of presentations and surpassing 20 competing teams**.
- Utilized a **data-driven approach** and applying **statistical techniques** to analyze and interpret data, resulting in a highly effective and productive team that delivered quality work under pressure.