Bill (Ze Tao) **Wang**

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Education

University of Waterloo	Waterloo, ON
Bachelor of Software Engineering, Honours	*Sept 2022 – April 2027*

- Academic representative. Varsity athlete–UW Frisbee team. Awarded the President's Scholarship of Distinction.
- **Relevant Courses:** Programming Principles, Intro to Methods of Software Engineering, Intro to Data Abstraction and Implementation, Foundations of Sequential Programs, Logic and Computation.

Experience

Software Engineer, Intern	May 2023 – Aug 2023
AdaptivePulse	*Remote – Waterloo, ON*

- Developed **3 scalable software tools** using **AWS CDK** to aid the process of managing thousands of requests and submitting bids to complete new projects proposed by other companies.
- Programmed a **Python** Q&A chat-bot integrated with OpenAI's **LLM gpt-3.5-turbo** for **NLP**, referencing a **database storing over 3000 vectors** made from relevant PDF files on **Pinecone** for queries on RFPs.
- Exceeded expectations in creating a **MVP in under 1 week** by meticulously orchestrating a comprehensive strategic framework and expeditiously engineered the application by taking advantage of the **AWS IaaS tools**.
- Engineered web crawlers and scrapers using **Selenium** & **Requests**, increasing speed by 75% while scraping documents and data off relevant sites and storing them in **Amazon S3** & **Amazon Redshift** databases.
- Designed and implemented backend **RESTful APIs** using **FastAPI** & **Docker** for the frontend and chat-bot, enabling seamless interaction and data exchange between them and other internal systems.

Programming Instructor	May 2022 - August 2022
RoboEDU	*Markham, ON*

- Developed and instructed an intermediate Python curriculum focused on **OOP**, real-world applications, and designing projects. Other technologies covered included **Git**, and **Unix** commands.
- Mentored 5-15 students on the subject of **machine vision**, utilizing ANKI Cozmo, pre-trained data models, and **OpenCV** for advanced **facial recognition**.

Projects

⚙ **Schedulr**	AWS RDS, PostgreSQL, React, Go (Gin)

- Web application designed to manage group members' schedules and organize time for group meetings.
- Refactored the backend Gin handlers for processing frontend requests and handling Google Calendar API calls.

⚙ **Personal Website**	Javascript, Three.js, anime.js, jQuery, HTML, CSS

- Fifth iteration of my personal portfolio. Utilized Three.js for 3D animations and jQuery for DOM manipulation.

⚙ **reWordle**	Python, PyQT5, JSON

- Developed a game modeled after Wordle from the New York Times for a teaching curriculum.
- Utilized PyQt5 for the app interface and JSON for data storage. Defined explicit steps are provided for instructional uses on how the creation of the game.

⚙ **pvim**	Vim, Lua

- Custom Nvim setup, a self-maintained & specially built IDE for work and projects to increase workflow efficiency.

Hackathons

Your Voice Is Power	*3rd Overall*	Python, Earsketch API

- Composed beats conveying powerful messages on climate change and aboriginal awareness by adapting to develop on the given software and the provided API.

Canada FBLA	*10th Nationally*	Javascript, Express.js, jQuery, HTML, CSS

- Developed a web quiz application composed of 20 questions, testing users' knowledge about random FBLA facts.
- Designed the backend using Express.js to catch AJAX requests sent from the frontend to process user input and update JSON file containing user data.

Her Code Camp	*2nd Overall*	Python, Rotman API

- Led a team to developed a stock trading algorithm using Python and the provided API to generated over $10,000 of profit in a simulated environment.

Skills

Languages	:	Python, C, C++, Java, JavaScript, Go, Assembly
Frameworks	:	Docker, FastAPI, Serverless, Express.js, PyQt5, Kivy, LangChain, Streamlit, SQL
Dev Tools	:	Amazon Web Services CDK, jQuery, Git, Linux, Vim, OpenCV, Figma, Flutter, Jira, Slack