Wyett "Huaye" Zeng

w33zeng@uwaterloo.ca | 519-729-8107 | wyett-zeng.com | LinkedIn | GitHub

Education

University of Waterloo & Wilfrid Laurier University   Sep 2020 – Aug 2025

Bachelor of Computer Science and Business Administration (4.0 GPA)

Work Experiences

CIBC – Gallant MacDonald | Data Scientist   Jan 2023 – Apr 2023

- Developed the review automation program, which reduces a 30 minute manual task to less than 7 minute automated task. The program's batch-processing capability supports the team's monthly workload of over 50 reviews. The program is built with **PyQt5** with **multi-threading** capabilities using **QThread**; it also makes **RESTful API calls** to retrieve data from various external partners.
- Developed the market analysis automation report that presents hundreds of market trend graphs to team members in less than three minutes. The algorithm is created with **Morningstar API**, **pandas,** and **Seaborn.**

Siemens Healthineers | Android Software Enginner   Jan 2022 – Apr 2022

- Developed and maintained the Android program NXS for Epoc Blood Analysis System's host-4 device using **Android Studio** and **Java**. Since NXS is the OS of a medical device and patient safety is on the line, **correctness** is the utmost priority, and code changes go through rigorous review and testing.
- Fixed the Glucose conversion issue, which arose from incorrect **asynchronous saving logic** with **Realm database** and **Reactive Java API**. This is a high-priority and complex issue, as incorrect conversion can lead to erroneous medical readings, impacting patient safety. However, multiple threads simultaneously make calls to the database, which makes tracing and fixing the root cause challenging.

Doodle Mobile Ltd. | Product Manager   May 2021 – Aug 2021

- Developed a game-level creation algorithm that employed many techniques from **nodal networks** to produce over 10,000 high-quality levels for the mobile game Crossword Quest using **Java**.
  - Version 1.4.6 saw advertisement revenue grow by 15%, and in-app purchases grow by 80%.
  - Version 1.4.8 saw advertisement revenue grow by 25%, and in-app purchases grow by 30%.

Projects – more projects available at wyett-zeng.com

Voyage

- Currently developing a website and mobile apps that leverage **GPT** or other **NLP models'** capabilities to create customized travel itinerary plans.
- The project contains 3 major components: the frontend interface created with **React** that receives user input and make **RESTful API** calls to our backend server; a backend server built with **Go** that receives and handles incoming API calls and manages user account and **database**; and a component that interacts with NLP models.

Research Assistant - Wilfrid Laurier University

- The research's objective is to gain insights into how investors' perceptions of the current state of the economy influence the required risk premiums for various investment horizons. I process Dow Jones' news corpus with **efficient** and **optimized** Python code as the data is massive, and apply **LDA** model to the processed data.

Skills

- Languages: Java, Python, C++, C, C#, Go, SQL, Bash, JavaScript, HTML/CSS, VBA
- Tools: Pytorch, Scikit-Learn, Keras, Pandas, NumPy, Seaborn, Postman, AWS, Azure, Git, SVN, Jenkins, Tableau, MySQL, Android Studio, Jira