Mingyu Liu





Education

Candidate for Bachelor of Computer Science

University of Waterloo, Sep. 2019 - Apr. 2024

Faculty of Mathematics Global Scholarship (\$15,000); CS International Student Upper-Year Scholarship (\$3,000); President's Research Award (Twice, \$1,500).

Candidate for Bachelor of Business Administration

Wilfrid Laurier University, Sep. 2019 - Apr. 2024

Finance Specialization
Economics Minor

Skills

Languages /// TypeScript/JavaScript, Java, HTML, CSS, C/C++/C#, Python, Kotlin, Golang, SQL **Tools/Frameworks** /// React, Vue, React Native, Unity, GraphQL, Node.js, Spring, MongoDB, Firebase, Neo4J, D3.js

Work Experience

Bloomberg LP

Aug. - Dec. 2023

Software Engineering Intern

Manhattan, New York

- Architected and implemented a **GraphQL** server layer on top of internal Financial Analytics data services using **C++** and **Python**.
- Developed and deployed a business intelligence web app with React (TypeScript), Webpack, Flask (Python), Docker, Kubernetes.

Sibros Technologies

Jan. - Apr. 2023

Frontend Software Engineering Intern

San Jose, California

- Designed and implemented from scratch a Gitlab-integrated ticketing system with React (TypeSript), HTML, CSS, Ant Design.
- Worked with end-to-end testing tools, Cypress and Playwright, and participated in test suite migrations.

reebee Inc. (now acquired by Flipp)

Jan. - Apr. 2022

Android Software Engineering Intern

Kitchener, Ontario

- Led UI/UX redesign project while leveraging cross-functional partners to improve aesthetics and user flow of the Android *reebee* app.
- Refined the app's support for backend logging systems in Kotlin and fixed defects related to various Android design patterns.

CARFAX Canada

Jan. – Apr. 2021

Product Prototyper Intern

Waterloo, Ontario

- Developed email templates using Figma, HTML, CSS and cloud functions in Node.js to send scheduled emails through SendGrid.
- Built interactive internal tools in **TypeScript** to send updates to and visualize vehicle data from **cloud Firestore**.

Startup Project

Software Engineer Lead @Beyz.ai (https://beyz.one/)

Sep. 2023 - Now

- Personalized mock interview platform for both candidates and interviewers based on large language models and generative Al.
- Developed using Next.is, React + TypeScript, Tailwind CSS, Headless UI, tRPC, Prisma, MongoDB, and deployed through Vercel.

Research Experience

1. University of Waterloo, Human-Computer Interaction Lab (WatVis)

lan. 2023 - Now

- Researching on **VR** communication system for annotations and data visualization in the **aviation** domain.
- 2. University of Waterloo, Formal Methods Group (WatForm)

May - Aug. 2023

- Co-author of Neo4j Browser: Visualizing Variable-Aware Analysis Results, accepted by International Conference on Software Engineering (ICSE) 2024 Demonstrations Track
- Developed dynamic visualization of the Neo4j graph database using D3.js, React, Redux and TypeScript.
- 3. University of Waterloo, Human-Computer Interaction Lab (WatVis)

Sep. 2022 - Apr. 2023

- Second author of Exploring Interactive Color Palettes for Abstraction-Driven Exploratory Image Colorization, conditionally
 accepted by CHI Conference on Human Factors in Computing Systems (CHI) 2024
- Designed and implemented the entire frontend portal; conducted user studies and analyzed research data.