Xin Huey Wong

416-821-8127 | xinhuey.wong@gmail.com | linkedin.com/in/xhwong | github.com/xinhuey | Website

EDUCATION

University of Waterloo

Waterloo, Ontario

Bachelor of Computer Science, Software Engineering Specialisation, 4A Term

Sept 2021 - Apr 2026

• Relevant Coursework: Algorithms, Data Structures and Data Management, Introduction to Artificial Intelligence

EXPERIENCE

Software Engineering Intern

Jan 2025 - Apr 2025

Cactus Information Systems

Malaysia

- Participated in system design meetings for a new production line information system, deciding on the **MVVM** architecture to understand and translate functional requirements into actionable development tasks.
- Designed and implemented interactive WPF forms with robust validation to efficiently retrieve, manage, and display supplier and customer information from a MySQL database, streamlining user experience and data accuracy.

Software Developer

May 2024 - Aug 2024

Imagine Communications

Waterloo, ON

- Ensured Versio Control broadcasting application stability by testing and maintaining **Docker** containers and **Kubernetes** pods, updating Docker versions to uphold security standards.
- Engineered and deployed Python and Selenium-based automated testing frameworks for Versio Control, achieving a 50% reduction in regression testing time.
- Optimized performance of Versio Control by configuring Amazon Machine Images (AMI) on EC2 Instances.

VP of Development, UW Data Science Club

Sept 2024 - Dec 2024

University of Waterloo

Waterloo, ON

- Developed and deployed a **Next.js** QR code scanner application, enabling seamless member verification and efficient check-in for **events hosting 100+ participants** through API integration with **MongoDB**.
- Created automated data validation scripts in **Python** to cross-reference member data between CSV files and MongoDB, significantly reducing manual verification efforts and ensuring data integrity.
- Maintained and regularly updated the club website, serving **300+ members**.

Projects

Stock Tracker App | MongoDB, Express.js, React, Node.js

June 2025

- Built a full-stack **MERN** web application allowing users to create and manage custom stock watchlists, persisting symbols in **MongoDB** via Mongoose and exposing RESTful CRUD endpoints with **Express.js**.
- Integrated third-party market data APIs (Polygon.io) to fetch real-time stock prices, changes, and percentages, and implemented a **60-second auto-refresh loop** for up-to-the-minute accuracy.
- Added an intuitive React dashboard with interactive charts and drill-down historical data, boosting engagement by 30%

LinguaStream | Python, Flask, React, Firebase

May 2024

- Designed and developed the front-end of a web application capable of translating YouTube video audio into multiple languages, utilizing **React** and Chakra UI.
- Integrated front-end components with **Flask**-based backend services, ensuring seamless data transmission through thoroughly tested API endpoints via **Postman**.

MIPS Compiler $\mid C++, DFAs, Tokenising, Parsing$

Jan 2023 – Apr 2023

• Developed a robust compiler in C++ to convert a high-level C-like programming language into optimized MIPS assembly, utilizing deterministic finite automata (**DFAs**) and regular language theory for efficient lexical analysis, parsing, and type checking.

TECHNICAL SKILLS

Languages: Python, C/C++, C, SQL (Postgres), JavaScript, HTML/CSS

Frameworks: MongoDB, Express.js, React.js, Node.js, Flask

Developer Tools: Git, Docker, AWS, Postman, Visual Studio, Kubernetes, Visual Basic

Libraries: pandas, NumPy, Matplotlib, Selenium