# Yingxuan (Alvin) Hu

#### **Education**

#### University of Waterloo - David R. Cheriton School of Computer Science

Waterloo, ON

Bachelor of Computer Science (CO-OP, double degree program)

Aug 2020-Aug 2025

• Relevant coursework: Algorithms, Object-Oriented Programming, OS, App Development, Linux, Optimization etc.

#### Wilfrid Laurier University - Lazaridis School of Business and Economics

Waterloo, ON

Bachelor of Business Administration (CO-OP, double degree program)

Aug 2020-Aug 2025

• Relevant coursework: Macro and Microeconomics, Investment Management, Business Strategy etc.

## **Work Experience**

#### **ICON Office Environment**

Brantford, ON

Data/Product Analyst

Sept 2023-Dec 2023

- Developed a data analysis program using Python, with libraries such as Pandas, Numpy and Matplotlib. Provided insightful past sales data analysis and visual graph representations for each product.
- Programmed reusable tools for future sales projections using company-specific algorithms with Python and SQL.
- Set up government supply arrangement for the company, also achieving ISO9001/14001 certification
- Composed new business plan and standard operating procedures, demonstrated management skills.

OMERS

Toronto, ON

ServiceNow Developer

Jan 2023–Apr 2023

- Resolved multiple enterprise-level issues using <u>Java</u> and JavaScript, enhancing system performance and UI.
- Developed and maintained <u>ServiceNow</u> elements like workflows, business rules, UI policies, and client scripts.
- Performed devleoping/testing/publishing of ServiceNow applications, familiarized with <u>SDLC</u>.

#### **CHANGTONG Communication Data Co.**

Shenyang, China

Full-stack Developer

Jul 2021-Sep 2021

- Successfully delivered a municipal COVID-testing system platform project with C++, HTML, CSS as a team.
- Updated and maintained 10+ website interface to align with current marketing standards and user expectations.
- Participated in team code reviews and debugging to provide constructive feedback to team members.

# **Projects/Extracurricular Activities**

#### **Application Development**

Waterloo, ON

Team member

Jan 2024-Apr 2024

- Developed an Android application with a team using <u>Kotlin</u> JetPack and <u>Git</u> workflows; the app is a dating platform for Waterloo students.
- Created multiple user interfaces and integrated them with the backend to enhance user experience
- Used Google Firebase to store user data and matched users with others' profiles based on their preferences using our efficient algorithm.

#### **IBM Machine Learning Professional Certificate**

Coursera

Student

Sept 2023-Dec 2023

- Completed IBM's ML course covering ML fundamentals. Including regression, decision trees, and neural networks.
- Gained proficiency in Jupyter, using libraries like Pandas and Scikit-learn for data analysis and model building.
- Applied ML to real-world scenarios, involving data processing, model training and analysis.

#### Compiler Development for WLP4(Simplified C++)

Waterloo, ON

Team member

Apr 2023-Aug 2023

- Built a compiler for WLP4, encompassing lexical analysis, syntax parsing, and semantic validation with DFA and custom parsing algorithms
- Implemented functions like code generation, linking and loading, converts WLP4 to Assembly language (MIPS).

### **Monopoly Coding Project**

Waterloo, ON

Team member

- Dec 2022–Apr 2023
- Created a monopoly game with <u>C++</u> in a team of two, efficiently using the features in OOP
- Implemented polymorphism by defining method in a base class like "Location", that its subclasses such as "Jail", "Property", "Chance" etc. will handle different actions.
- Utilized Encapsulation feature to declare critical game data as private within their respective classes, Manipulate these data only through public methods like "payRent" to ensure changes follow the game rules.