

# Yingxuan (Alvin) Hu

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## 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, Computer Networks

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

Waterloo, ON

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

Aug 2020–Aug 2025

- Relevant coursework: Macro and Microeconomics, Investment Management, Business Strategy

## Work Experience

### Ericsson

Ottawa, ON

ML/AI Software Developer, Radio

Jan 2025–Aug 2025

- Assisted in engineering an ML-based Radio-Log Anomaly Detection (RLAD) platform, accelerating anomaly identification speed by 120%.
- Developed full-stack solution using React(frontend) and Python(backend); created JSON parsers capable of processing 100+ log files per batch, improving data handling by 25%.
- Contributed GNN and LSTM models development(for RLAD) and scripted an Algorithms API to analyze outputs from multiple models, providing clients with precise and comprehensive final results with 40% improved reliability.
- Developed testing tools to conduct unit and automated testing, as well as software/hardware integration testing in a lab environment, ensuring smooth integration with Ericsson's troubleshooting platform and CI/CD infrastructure.

### OMERS

Toronto, ON

Solution Engineer, ServiceNow

Jan 2023–Apr 2023

- Resolved multiple enterprise-level issues using Java and JavaScript, improving system performance by 20% and UI responsiveness.
- Developed and maintained ServiceNow components, including workflows, business rules, UI policies, and client scripts. Leveraged Glide APIs to reduce incident resolution time by 15%.
- Engineered, carefully tested, and deployed 30+ ServiceNow application with ITIL-aligned SDLC processes. Strengthening knowledge in version control, debugging, and application scoping.

### CHANGTONG Communication Data Co.

Shenyang, China

Full-stack Developer

Jul 2021–Sep 2021

- Engineered a municipal COVID-testing platform project with C++, HTML, and CSS, ensuring thorough functionality and 100% uptime during peak usage.
- Redesigned and consolidated 10+ website interfaces, improving load time by 10%, also align with current marketing standards and user expectations.
- Managed multiple databases, optimizing SQL workflows to decrease query times by 15% and ensure data integrity.

## Projects/Extracurricular Activities

### Stock Portfolio Project

Waterloo, ON

Student

Feb 2024–Apr 2024

- Designed and managed a simulated investment fund in Rotman Portfolio Manager over a two months period. The Goal is to drive short-term gains through a custom quantitative strategy.
- Developed a trading algorithm in Python to analyze 30 stocks, scoring each stock by price momentum, volume surges, 50 days SMA deviations, and media coverage scores to rank the top performer and selling point.
- Achieved weekly returns with a Sharpe Ratio of 4.93 and a Sortino Ratio of 4.96. Used momentum-volume threshold model that will trigger to sell when momentum and volume drop under certain thresholds.

### Application Development

Waterloo, ON

Team Member

Jan 2024–Apr 2024

- Engineered an Android application for Waterloo students as a team, using Kotlin, Jetpack libraries, and Git-based workflows for version control.([View Project](#))
- Designed multiple user interfaces and implemented corresponding backend frameworks to optimize user experience.
- Implemented Google Firebase for real-time data storage and retrieval, developed a custom matching algorithm to pair students with  $O(n\log(n))$  complexity.

### Sales/ROI Forecasting and Visualization

Brantford, ON

Employee

Sept 2023–Dec 2023

- Developed a comprehensive sales forecasting tool with automated data pipelines to refresh sales using Python, pandas, Prophet, and ARIMA models to predict future sales trends for 100+ product SKUs.