Gary Huang

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EDUCATION

University of Waterloo

Waterloo, ON

Bachelor of Software Engineering, Honours (BSE)

Sept 2021 - April 2026

Relevant Courses: Operating Systems, Data Structures and Algorithms, Object Oriented Programming, Databases, Networking

EXPERIENCE

GTS (Global Trading Systems)

Jan 2025 – Present

Python Developer Intern

- Designed a matching algorithm to match trades to ensure fair distribution of fees among trading groups
- Verified CAT fees to ensure accurate charges and compliance with regulatory requirements

QTG Capital Management

May 2024 – Aug 2024

Software Engineer Intern

- Created a stock market backtester in Python. Designed and tested a proprietary stock strategy on Shanghai Stock Exchange stocks, achieving a sharpe of **2.97**
- Preprocessed Level 3 (L3) high-frequency trading data by integrating execution flow and order flow into a detailed order book, improving backtesting accuracy
- Developed a web scraper using **Selenium** to extract live news updates, facilitating real-time delivery of news to company chat for informed decision-making

Ford Sept 2023 – Dec 2023

Software Engineer Intern

- Enhanced system responsiveness by 125% through C++ code optimization within the node addon codebase, enabling the use of low cost hardware for Ford EV infotainment systems
- Implemented **dynamic arrays** and thread-safe **maps** using the **iterator pattern** and **mutexes** to enhance code reusability and eliminate data coherency issues
- Cached style values resulting in a 30% reduction in the frequency of IPC messages transmitted

Genellipse May 2022 – Aug 2022

Data Scientist Intern

- Automated insurance claim form extraction by prototyping a solution using PyTorch and OpenCV, which later evolved into a full-scale project
- Employed **OpenCV** for preprocessing legacy insurance claim forms, reducing noise and allowing **BERT** machine learning model to interpret client information with **98%** accuracy
- Developed core information requesting server to automate client's annuity claims using Python, deployed on AWS Lambda and MySQL server

Projects

Chess Engine $\mid C++$

https://github.com/garyhhj/chess-engine-v2

• Boosted chess.com account to over 1500 elo with over 90% win rate before getting banned

TECHNICAL SKILLS

Languages: Python, C++, JavaScript, TypeScript, HTML/CSS, SQL

Tools: MySQL, Airflow, OpenCV, Selenium, Pytorch, SDL2, AWS, Valgrind, Git