

Welvin Bun

+852 6955 5300 | welvin07@gmail.com | <https://welvin21.com> | <https://www.linkedin.com/in/welvin-bun/>

EDUCATION

The University of Hong Kong

GPA: 3.94/4.3

Computer Science (First Class Honours)

Sept. 2018 - May 2022

- **Awards:** HKU Foundation Full Tuition Scholarship, HKU Engineering Dean's Honours List, Chung Chow Han Lan Memorial Scholarship 2020, VTech Scholarship 2021, HKMA-ICT Scholarship 2022.

EXPERIENCE

Morgan Stanley

August 2022 - Present

Technology Associate, Trading Risk Controls

Hong Kong

- Working on a next-generation ultra-low latency trading engine that encapsulates client connectivity, controls, SORT, and other components within a single large system. Primarily working with C++, Linux, and Python.

y-intercept

June 2022 - August 2022

Quantitative Developer Intern

Hong Kong

- **Removed 2 daily man hours for manual script-based reports generation** by building an all-in-one reporting system that includes multiple post-trade analysis reports such as execution slippage, trade reconciliation, and strategy risk monitor.
- **Built a new ETL pipeline for crypto market data for quantitative researchers and traders.** Standardized dataframe format that includes bar data, funding rate, borrowing rate, etc across multiple exchanges (FTX, Binance, OKEX). **Optimized daily build and download time** using parallelization.

Morgan Stanley

June - August 2021

Technology Summer Analyst, Trading Risk Controls

Hong Kong

- **Reduced potential market impacts** by providing risk managers with a machine learning-based recommendation platform for releasing/rejecting high-touch orders.
- **Built an end-to-end machine learning pipeline** that includes log data collection, cleaning, exploratory data analysis, model design, and validation.
- **Won the APAC regional intern coding competition** by building a self-playing Ultimate Tic-Tac-Toe AI bot on C++ using minimax algorithm with alpha-beta pruning and state caching.

Société Générale

June - August 2020

Data Science Intern

Hong Kong

- **Reduced time spent for daily market news data analysis by 90%** by developing a full-stack NLP application that extracts named entities, generates summaries, and analyses sentiments from market news articles.
- **Assisted risk managers to capture anomalous patterns in time-series market risks data** by developing a full-stack application with CNN classifier and synthetic training data.

SIDE PROJECTS

- **Trashtank** Worked with [Clearbot](#) on a computer vision-powered waste management system for an industry client in Hong Kong ([See more](#)).
- **Spine deformity detection project** Worked with Dr. Kenneth Wong as a Research Assistant on a desktop application to help medical partners in early spine deformity diagnosis using Kinect sensor and deep learning model for anatomical landmark detection.

ACHIEVEMENTS AND ADDITIONAL EXPERIENCES

- **Innovator Award, SWUFE Hackathon** Representing HKU in an 80 hours inter-university fintech hackathon, competing against universities from all around the globe such as UC Berkeley, ETH Zurich and Tsinghua University.
- **Teaching Assistant, COMP 3314 Machine Learning** Led biweekly tutorial discussions, developed problem sets, marked final examination of a 150-students class.
- **President, HKU Indonesian Association** - Organized events such as Indonesian cultural night and welcoming gathering for approx. 150 student members.

TECHNICAL SKILLS

- **Programming Languages** Python, C++/C, JavaScript, Typescript, Java, Haskell, SQL
- **Dev frameworks** React, Redux, Qt, NodeJS, MongoDB, Express, Flask, GraphQL, FastAPI, Docker, GHCi, KDB
- **Machine Learning** Tensorflow, Keras, PyTorch, Numpy, Pandas, scikit-learn