

Welvin Bun

+852 6955 5300 | welvin07@gmail.com | <https://welvin21.com>

EDUCATION

The University of Hong Kong

Bachelor of Engineering in Computer Science

Hong Kong

Sept. 2018 - May 2022

- **cGPA:** 4.0/4.3.
- **Awards:** HKU Foundation Full Scholarship 2018-22, Chung Chow Hang Lan Scholarship 2020, VTech Scholarship 2021, HKU Engineering Dean's Honours List, HKU Engineering Dean's fund for Research Exploration.
- **Courses:** Machine Learning, Applied Deep Learning, Natural Language Processing, Functional Programming.

The University of Toronto

Visiting student, Computer Science

Ontario, Canada

Jan - June 2021

- **GPA:** 3.88/4.0.
- **Courses:** Advanced Algorithms, Artificial Intelligence, Systems Programming, Probability and Statistics II.

EXPERIENCE

HKU Computer Vision Group

Student Research Assistant

Hong Kong

Sept. 2021 - Present

- **Working on a radiation-free spine deformity examination tool** that uses Kinect sensor and deep learning models for anatomical landmarks detection, to be used by a medical partner in Hong Kong.
- Supervisor: Dr. Kenneth Wong. Under the HKU Engineering Dean's fund for Research Exploration scheme.

Morgan Stanley

Technology Summer Analyst, Trading Risk Controls

Hong Kong

June - August 2021

- **Reduced potential market impacts** by providing risk managers with a machine learning-based recommendation platform for releasing/rejecting high-touch orders.
- **Implemented an automated pipeline** that collects and processes petabytes of historical market orders data.
- **Built an Ensemble model** as base classifier that given a new order, gives action recommendation based on past decisions made. Achieved 93% accuracy, 91% ROC-AUC score, and 95% F-1 score on a test set consisting of 3 months' worth of data.

Société Générale

Data Science Intern

Hong Kong

June - August 2020

- **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.
- **Implemented various cluster analysis algorithms** on featurized 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.

PROJECTS

- **Trashtank** A computer vision-powered waste management system for an industry client in Hong Kong ([See more](#)).
- **SortIt** A sorting algorithms visualizer on the web to help understand different sorting techniques better ([See more](#)).
- **Fixels** A deep learning application to assist ophthalmologists in diagnosing diabetic retinopathy based on retinal images data of patients ([See more](#)).

ACHIEVEMENTS AND ADDITIONAL EXPERIENCES

- **Teaching Assistant, ENGG 1330** Led weekly discussions for 30 students on introductory Python concepts.
- **Champion, FinHack 2019** Won a 36-hour FinTech Hackathon in Hong Kong, amongst roughly 50 teams.
- **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, NodeJS, Gatsby, MongoDB, Express, Flask, GraphQL, FastAPI, Docker, GHCi
- **Machine Learning** Tensorflow, Keras, PyTorch, Numpy, Pandas, scikit-learn