

Wesley Tsang

It is my ambition to be at the forefront of a new generation of innovators, a pioneer who will push the limit of digital possibilities to a whole new level.

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wesleytsang.me

Work Experience

Orient Overseas Container Line - Assistant Technical Analyst (Graduate trainee) Aug 2019 - Jan 2021

- Developed and designed new cloud-native web application to facilitate system migration included functionalities such as Container Repair approval, Booking and Tracking
- Followed best practices of Agile development, Architecture design (achieved "The Twelve-Factor" defined by Heroku), TDD and CI/CD
- Improved performance of data load from minutes to seconds by improving SQL queries and design new mechanisms
- Developed skills included Spring Boot, Hibernate, Solace, VueJS, MongoDB, NodeJS, ExpressJS, Jenkins
- Made use of different tools such as Kanban, SonarQube, PACT, Grafana etc. to ensure high quality of code and achieved 100% test case coverage and zero vulnerabilities from SAST Testing

AdmanGo - Full-stack Web Developer (Intern) Jun - Jul 2018

- Played an important role in developing new functions on the company's advertisement monitoring product used for marketing purposes
- Built functions to detect, analyse and visualise advertisement data from different social media
- Reviewed existing codes in Python, C# and JS, and made enhancements to improve memory usage, code structure, readability and gained experience on using Google Cloud Bigtable

China Galaxy International Securities (HK) Co. Ltd. - Software Engineer (Intern) Jun - Aug 2017

- Developed in-house software for different departments to support their daily operations such as automated data load, alert system and deployed an internal Git server
- Collaborated with fellow interns and communicated with different non-technical people to understand their needs and expertise
- Developed skills included Java, Hibernate, C# and ASP .NET

Education

King's College London - MSci Computer Science (1st Class Honors) Sep 2015 - 2019

- Study focused on AI, Computer Vision and Deep Learning

Udacity - Computer Vision, Deep Learning Foundation, Full-Stack Web Development Nanodegree

St John's College Portsmouth - A-Levels Sep 2009 - Jun 2015

- Mathematics (A*), Further Mathematics (A), Chinese (A)

Projects

Resource Allocation Applications using Computational Intelligence Methods Oct 2018 - Apr 2019

- Researched, applied and evaluated two state of the art and one newly published optimisation algorithms to optimise the "Project Markers Allocation" problem with hard and soft constraints for KCL Informatics department
- Evaluated algorithms include Genetic algorithm (GA), Simulated Annealing (SA) and Battle Antennae Search (BAS)
- Formulate problem situation, research and reproduce algorithm from latest research paper
- Resulted GA has the most consistent performance (fitness value >84), and discovered a great potential of BAS

Computer-Aided Imaging Diagnosis Nov 2017 - May 2018

- Worked with researchers from the medical field who hypothesized that acid reflux can be observed in endoscopy under a certain condition
- Applied deep-learning techniques to build a Convolutional Neural Network (CNN) to classify diseases from endoscopy videos
- This included collecting data, pre-processing video data, training, testing and evaluate the CNN
- Successfully classified diseases with up to 90% accuracy, visualised filters for each layer but no strong evidence to prove any visible patterns but still gave the researchers a strong support on their hypothesis

Professional Skills

- Programming Languages: Java, Python, C++, Scala, Prolog
- Web: HTML, CSS, JavaScript, SpringBoot, Flask, NodeJS, ExpressJS, VueJS, AngularJS, ReactJS
- Databases: MySQL, MS SQL, Oracle SQL, MongoDB, PostgreSQL, SQLite, H2
- AI: Optimization, Machine Learning, Deep Learning (CNN, RNN, GAN), Computer Vision, TensorFlow, Keras, PyTorch, MATLAB, Cloud Computing
- Languages: English (Fluent), Cantonese (Fluent), Mandarin (Fluent), Japanese (Basic)