Jason Chan Jin An

Tel: 6809 4173 | Email: <u>jason.ja.chan@clp.com.hk</u> | Website: <u>https://jasonchanhku.github.io/</u> | Github: <u>jasonchanhku</u> **EDUCATION**

The University of Hong Kong (HKU)

Hong Kong

Master of Science in Statistics, Data Analytics track

Sep 2019 – Present

 Notable Coursework: Python Programming, Spatial Data Analysis, Marketing Engineering, Big Data Analytics (Deep Learning), Statistical Machine Learning, Time Series Forecasting, Advanced Statistical Modelling, Multivariate Methods

Bachelor of Science in Quantitative Finance, CGPA: 3.40

Sep 2012- Aug 2016

- **Notable Coursework:** Computer Programming (C++), Financial Engineering (R Programming), Quantitative Risk Management, Math Finance, Multivariable Calculus, Uni Math II, Probability Modelling, Financial Modelling
- Scholarships: HKU Scholarship for Outstanding International Students, ELSI Scholarship

SKILLS

- Programming: Python (primary), R, C, C++, JavaScript, HTML, Java Database: SQL Systems: UNIX
- Others: Web Scraping, xgboost, lightgbm, TensorFlow, Keras, LSTM, spaCy, Azure, Tableau, Cloud Computing

WORK EXPERIENCE

CLP Holdings, Innovation, Big Data and Al

Hong Kong

Data Scientist – develop and deliver advanced AI solutions using ML & deep learning models Mar 2019 – Present Short Term Load Forecast (STLF)

- Built an advanced deep learning LSTM model with TensorFlow that trains and deliver email daily to the engineers
- Performed data cleansing and advanced feature engineering on demand, actual and forecast temperature
- Model achieved great accuracy with average of 2.1% MAPE (Jan-Mar 2020) and superior to previous model
- Build and maintained a Power BI dashboard to monitor the daily model performance and prepare deliverables
- Adjusted the model to capture the effect of Coronavirus and achieved March MAPE of 1.7%

Meter Fraud Detection POC

- Performed advanced feature engineering techniques and text mining on meter and logging data
- Built a xgboost model with adjusted cost function to detect fraud from a highly imbalanced class dataset
- Model produced a F1-Score of 0.78 based on a 5-fold cross validation despite limited data and imbalanced class
- Presented findings to external party and received positive feedback on the model and results

Fidelity International Hong Kong

Data Scientist – design data science solutions using business' defined methodology

Dec 2016 – Dec 2018

- Data preparation, cleansing, audit, and parsing of MPF customers address data into spatial data and perform spatial analysis to assist marketing team to develop marketing strategy
- Implemented Markov Chain attribution for MPF marketing channels by blending data from Google Analytics and internal customers' data to assist current implementation deliverables
- Built outlier forecast analytics model for abnormal fund redemptions according to sales team's requirements
- Conduct advanced feature engineering to enrich dataset and improve accuracy of MPF customer churn prediction
- Bayesian time series forecasting of additional fund sales generated by online campaigns and present deliverables

RELEVANT PROJECTS

Mixed Martial Arts Fights Predictor Web App

- Web app that predicts winners of upcoming Ultimate Fighting Championship (UFC) Mixed Martial Arts fights
- Built using Python dash library with MVC design pattern and deep learning model for prediction
- Wrote Python script to web scrape weekly and push new data to Amazon Web Services bucket
- Web app featured on Plotly and Data Science Hong Kong (DSHK). Also showcased in DSHK hackathon.

Data Science Demand in Hong Kong

- Web scraping of Glassdoor website on Data Science jobs in Hong Kong using Python
- Exploratory data analysis on which companies have the highest rating and recommendation
- Perform segmentation using K means on jobs using rating, recommendation, and approval
- Perform text analytics on job descriptions of scraped jobs to find most common skills needed

SKILLS. ACTIVITIES & INTERESTS

Languages: Native English and Malay, Conversational Proficiency in Cantonese, Basic Mandarin

Activities: HKU RC Music Band Founder, Alteryx Data Science Guest Speaker

Interests: Music, Guitars, Fitness, Martial Arts, Kaggle, RPubs