KWAN TAK HEI, Fergus

Mobile: +852 6125 5752 E-mail: takhei611@gmail.com
Linkedin: https://linkedin.com/in/tak-hei-kwan
GitHub : https://github.com/heamabc
Personal Website: https://fergus-quant.herokuapp.com

EDUCATION

THE CHINESE UNIVERSITY OF HONG KONG

Bachelor of Science in Quantitative Finance, 2016-2020

- Minor : Computer Science
- GPA : 3.65/4.0
- Anticipated Graduation : Dec 2020

ABOUT ME

Motivational and innovative data science professional possessed with financial expertise, with international experience in AXA, Quant China, Avant Capital and Mass Mutual. Dependable and organized team player with the ability to communicate effectively and efficiently. Proven success in data science project, data engineering, and financial data analysis.

TECHNICAL SKILLS

Programming : Python, R, Bash, VBA
Tools : Bloomberg, AWS
Database : SQL and No-SQL
Finance : Interest Rate Model

FINANCE	★★★★★	expert
STATISTICS	★★★★★	expert
DATABASE	★★★★★	expert
MACHINE LEARNING	★★★★☆	advanced
LINUX & BASH	★★★★☆	advanced
AWS	★★★★☆	advanced

PROFESSIONAL EXPERIENCE

DATA SCIENTIST
AXA HK, Hong Kong, Sep 2019 - Present

• Streamlined the logic and structure of existing machine learning models
• Performed data mining and processing on data in database
• Utilized statistical analysis and machine learning algorithms to identify characteristics of cross-selling policies

QUANTITATIVE ANALYST
Quant China (Shenzhen), Shenzhen, Mar 2019 - Aug 2019

• Performed features generation and engineering on 50 CTA factors of commodity futures
• Applied stacking of different decision trees methods
• Obtained deep understanding of decision tree method and model selection

QUANTITATIVE ANALYST
Avant Capital Management (HK) Ltd., Hong Kong, Oct 2018 - Feb 2019

• Developed and backtested various trading strategies based on quantitative method
• Introduced rigorous statistical calculation into trading strategies to ensure the existence of the statistical property (ADF test, half-life, Hurst Exponent)
• Minimized the sophistication and risk-and-return ratio of the strategy

RECENT PROJECT

MACHINE LEARNING FUTURES TRADING STRATEGY
GitHub : https://github.com/heamabc/Machine-Learning-on-Futures

• Utilized and optimized several machine learning models including boosting decision trees
• Generated up to 30 features of commodity futures for machine to achieve greatest accuracy
• Analyzed and compared the impact of different features and application of different models

PAIR TRADING STRATEGY
GitHub : https://github.com/heamabc/Pair-Trading-Stategy

• Performed statistical tests, ADF test, half-life test, and Hurst Exponenet test
• Examined baskets of fundamentally and statistically correlated US stocks
• Achieved 1.6 sharpe ratio

ADDITIONAL ACTIVITIES

THE GOLDEN Z CLUB, THE STUDENT UNION OF THE CUHK
President, Feb 2017 - Jan 2018

• Organized 20 activities throughout the year, including 14 charity events

FUTURES TRADING COMPETITION
Wing Fung Financial Group, Apr 2017 - Nov 2017

• Obtained a 202% profit ratio at the end of the competition