

Chi – Kang Kuo

88 Linden Street, Allston, Boston, MA | 7737338027 | chikuo@bu.edu

| [linkedin.com/in/chi-kang-kuo](https://www.linkedin.com/in/chi-kang-kuo)

SKILLS AND CREDENTIALS

Programming: Python, R, MATLAB, C++

Mathematics: Statistics, Linear Algebra, Differential Equation, Stochastic Calculus, Computational Methods, Econometrics

Professional Certifications: Bloomberg Market Concepts

EDUCATION

M.S. Mathematical Finance & Financial Technology

Expected Jan. 2023

Boston University, Questrom School of Business

Boston, MA

- Coursework: Statistics, Programming (R, Python, C++), Stochastic Calculus

B.A. Economics [GPA: Overall: 3.4; Last 60: 3.8; Quantitative Finance: 3.9]

Sep. 2016 – Jun 2020

National Tsing Hua University, College of Technology Management

Hsinchu, Taiwan

- Coursework: Machine Learning, Financial Data Analysis, Quantitative Trading, Econometrics
Computational Method, Derivatives Valuation, Investment, Corporate Finance

PROFESSIONAL EXPERIENCE

Quantitative Investment Research Intern

June 2019 - June 2020

WorldQuant, LLC.

Taipei, Taiwan

- Developed a trading algorithm and backtested to evaluate the return, risk, and transaction costs; optimized investment portfolios to increase Sharpe ratio and Jensen's Alpha, resulting in reduced risk.
- Built a sentiment model with a Sharpe ratio of 4.0, initially used F-score for screening, structured a linear regression for sentiment index factors and extracted stocks with high R-square.

PROJECTS

Weather Option Pricing Project

Feb. 2020 - June. 2020

- Designed an insurance-like product and revamped the CME weather option to mitigate farmers losses from extreme weather events without incurring basis risk.
- Performed Monte Carlo simulation to evaluate and utilize antithetic variate to reduce variation.
- Tested and revised Wiener process in the mean-reversion model from normal to skewed distribution to logically assess intrinsic value and amend EWMA process to accurately simulate the weather pattern.

MACHINE LEARNING COMPETITION

Weather Option Pricing Project

Dec. 2019 ~ Jan. 2020

- Predicted credit card fraud from the bank's internal data by employing extreme gradient boosting, deep neural network and light gradient boosting machine.
- Performed EDA to assess factor correlation; replicated data through Rose algorithm to adapt an imbalanced outcome.
- Enhanced Performance by 10% via ensemble learning (Three-stage stacking), hyperparameter tuning, and feature engineering (Chi-square / Boruta); placed top 10% among 1366 teams.

ADDITIONAL INFORMATION

Language: Mandarin, English

Interests: Basketball, Baseball, Computer Building