TIAN ZHANG

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EDUCATION

COLUMBIA BUSINESS SCHOOL

New York, NY

MBA GMAT:740

May 2020

• Relevant Coursework: Corporate Finance, Managerial Economics, Capital Markets and Investment

COLUMBIA UNIVERSITY

New York, NY

MSc., Financial Engineering

GPA: 4.00/4.00

Dec 2018

• Coursework: Machine Learning, Statistical Data Analysis, Optimization Models & Methods, Stochastic Models, Monte Carlo Simulation, Computational Methodology in Finance, Analysis of Algorithms

THE CHINESE UNIVERSITY OF HONG KONG

Hong Kong, HK

BSc., Quantitative Finance

GPA: 3.78/4.00

May 2013

- Coursework: Linear Regression, Time Series, Corporate Finance, Options and Futures, Fixed Income
- Gap Year HSBC Futures IT Trainee (2012): Tailored futures T0 brokerage reports in Java/SQL
- Honors: Graduated with First Honor (top 5%); Dean's List; Bankee Kwan Scholarship (\$42,000)

EXPERIENCE

BLOOMTREE PARTNERS

New York, NY

Equity Long/Short Fund, Seed Fund of Tiger Management

Summer 2018

Summer Quantitative Analyst

- Applied minimum spanning tree and K-Means clustering method to detect stock clusters with high correlation on daily return, and analyzed impact of macroeconomics factors on clusters in Python
- Developed a new stock sentiment signal determination algorithm for equity long/short portfolio based on trends of tradeon ratios, integrated into web portal and back-tested accuracy by forward-alpha to improve 35% accuracy
- Predicted quarterly revenues for selected companies with credit card sales and web traffic data by various time series regressions (ARMA, GARCH etc.), and generated long/short idea by comparison with consensus estimations

HECHUAN AUTOMATION ENGINEERING CO. LTD.

Chengdu, China

Automation System Design, Controllers & Instruments Wholesaling Company

2015-2017

Financial Manager

- Managed over ¥500,000 (\$72,500) liquid asset on real estates, financial products, cash and stocks
- Spearheaded business proposal for three thermal projects generating over \(\frac{\pma}{8}\),000,000 (\(\frac{\pma}{1}\),150,000) gross revenue
- Led team of 3 analysts to monitor cash flows and optimize capital structure using Free Cash Flow for the Firm model

Hong Kong, HK 2013-2015

Operation Analyst, Equity Derivative

- Conducted prices, payoffs adjustment and risk metrics (Delta, Gamma) analysis for over 10 equity markets
- Enhanced trade capturing process resulting in 67% increase of trade accuracy and efficiency: automated event-driven adjustments for single stock, exchange-traded derivatives, over-the-counter options, warrants, and synthetic futures
- Initiated non-deliverable forward automation project with 10 team members to smooth front-to-back trade flow, justifying 100% increase in trade processing efficiency and accuracy for over 2000 deals/monthly

Summer Analyst, Business Management and Risk Control

Summer 2012

- Designed and offshored a control point to monitor duplicate trades as a mitigate plan of \$3.8M loss incident
- Consolidated existing reconciliation processes and automated the End-Of-Day risk reporting tool in Excel VBA

ADDITIONAL INFORMATION

Project: Algorithm Trading: Pair Trading Strategy

Spring 2018

- Calibrated Ornstein-Uhlenbeck (OU) model by maximum likelihood estimation with both long and short-term log return spread of equity pairs calculated by intraday market bar data
- Constructed portfolio from 10 pairs of stocks with lowest long-term variances and highest short-term variances
- Designed pair trading strategy for 20 crude oil companies, achieved alpha 0.44 and Sharpe ratio 45.4 in back-test **Programming:** C++, Excel VBA, Python, Matlab, Java, MySQL

Languages: Mandarin, Cantonese, German

Activities: Exchange program, University of Toronto, Canada; Summer program, University of Heidelberg, Germany

Interests: Violin (Chinese Amateur Level 7/10 for Violin), Musicals, Swimming, Badminton