CHAO ZHU

peterchaoz93@gmail.com • www.linkedin.com/in/chaozhu93 • (201) 208-9780

EDUCATION

BARUCH COLLEGE, CITY UNIVERSITY OF NEW YORK 09/15–Present
Master of Science in Financial Engineering expected December, 2016

PEKING UNIVERSITY 09/11–07/15
Bachelor of Science; Bachelor of Arts
Double Major in Applied Mathematics and Economics

FINANCIAL MODELING SKILLS

- Linear and logistic regression analysis, time series analysis: ARMA, GARCH, EWMA, ECM models
- Machine learning techniques, Decision Tree, K-means, Neural Network, and Support Vector Machine
- Dynamic affine yield term structure modeling using Kalman Filter QML
- Stochastic calculus: Ito's formula, Kolmogorov equations, change of numeraire, Feynman-Kac Theorem

PROGRAMMING AND COMPUTING SKILLS

- C/C++, MATLAB, R
- Python, SAS, VBA, SQL, SPSS, Unix Shell, MS Office, Q, spark

FINANCIAL EXPERIENCE

MKP CAPITAL MANAGEMENT, LLC., New York, US 06/16–Present
Credit Analytics
- Built a portfolio optimization app based on Bayesian Network for stress scenario and utility function selection, considering transaction cost and finance cost

MKP CAPITAL MANAGEMENT, LLC., New York, US 01/16–06/16
Quantitative Analyst, Risk Analysis and Portfolio Management Department
- Risk analysis based on historical transaction data, e.g. calculation of P&L, sharp ratio, hit rate and max drawdown
- Maintained weekly risk surveillance report for credit fund and opportunity fund, e.g. scenario maximum drawdown, trading strategy risk exposure
- Used Bayesian Network model to analyze the risk exposure of Brexit and its impact to global market
- Back tested a trading strategy using VIX index and S&P500 index based on implied volatility

CHINA CREDIT RATING CO., LTD, Beijing, China 03/15–06/15
Quantitative Analyst, Quantitative Research Department
- Researched reduced form and structure models to assess the risk of asset securitization
- Estimated the affine yield term structure for the Chinese national debt market by Kalman Filter QML

RAISE TECH CO., LTD, Beijing, China 08/14–10/14
Quantitative Analyst, Model Development Department
- Investigated indices methodologies, built trading strategies by trend-following indices CSI300, CNINDEX and back tested with historical data

BANK OF CHINA, Shanghai, China 06/14–08/14
Quantitative Summer Analyst, Personal Wealth Management
- Used decision tree algorithms to model client turnover

AWARDS

- Academic Excellence Award, 2012
- Grand Prize, 21st Challenge Cup, Peking University, 2013

CERTIFICATION

- Bloomberg certified in Equities, Foreign Exchange, Fixed Income and Commodities 08/15

PROJECT EXPERIENCE

BARUCH COLLEGE, CITY UNIVERSITY OF NEW YORK, New York, US 01/16–05/16
Course Projects
- Algorithm trading project: Alpha factor strategy based on style rotation and smart beta to optimize signal weights
- Machine Learning project: Using genetic algorithm to signal (feature) construction in high frequency trading, compared with different supervised learning models
- Big Data project: used C++ to built a real-time data scrubber and analyzer on HPC cluster; wrote VWAP model with Q; used pyspark to build a stock return prediction model based on social media information on Amazon AWS

LANGUAGE

Mandarin (native speaker)