TIANSHU YUAN
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QUANTITATIVE ANALYST

Quantitative finance professional with over *3* ***years' programming experience and proven ability to successfully convert ambiguous data into strategic decisions***

- Data Analytics (SAS, SQL, PYTHON)
- Financial Modeling and Forecasting
- Risk Management
- Programming (PYTHON, C#, C++)
- Asset Pricing
- Numerical Methods

EDUCATION

North Carolina State University, Raleigh, NC — GPA: 3.91
Master of Science (M.Sc.), Financial Mathematics, Dec 2018
Select Courses: Bayesian statistics, Stochastic Calculus, Monte Carlo Simulation, Statistical Inferences, Computational Methods, Machine learning.

University of California, Berkeley, Berkeley, CA — GPA: 3.94
Select Courses: Numerical Analysis, Time Series, The Structure and Interpretation of Computer Programs, C++ programming for financial engineering.

Shanghai University of Finance and Economics, Shanghai, China — GPA: 3.60
Bachelor of Science (B.S.), Business Administration Emphasis in Accounting, June 2013

PROJECTS

Bitcoin Futures Trading, PYTHON-C#-INTERACTIVE BROKERS — Winter 2017
- Implemented trading strategies and traded through Interactive Brokers and manage a small fund around $200,000.

Comprehensive Capital Analysis and Review (CCAR), SAS — Fall 2017
- Predicting PD, EAD, LGD using feature selection techniques, logistic regression and linear regression on loan-level mortgage data from Fannie-Mae and stress test under 3 different macro-economic scenarios from Federal reserve.

PROFESSIONAL EXPERIENCE

Graham Capital Management, Rowayton, CT — June 2018 – Aug 2018
Quantitative analyst - Internship
- Improve statistical property by constructing historical volume bars from tick data comparing to traditional time bars.
- Help portfolio managers better understand current market situation by creating a clearer visualization dashboard for back-testing and real-time visualization on price, alpha signals, position and back-testing PnL across multi-assets.
- Generate alpha signals based on high frequency features, back-testing alpha signals across multi-assets.
- Improve prediction accuracy on given financial dataset by ensemble a series of machine learning models including logistic regression, catboost, gradient descent boost tree.

IC asset management, Shanghai, China — May 2017 – June 2017
Quantitative researcher - Internship
- Helping manager to improve the back-testing speed by 50% by creating an event-driven back-testing framework with a file-based database and the capability to handle minute-level commodity futures trading data.
- Improve the portfolio optimization efficiency by broaden the assumption of the Black-Litterman model via Copula Opinion Pooling approach, calibrate non-normal market distribution with views through Monte Carlo simulations.
- Managing database for minute-level data, tick-level data and daily data with MySQL and MongoDB.

Nine Martingale Investment, Shanghai, China — Aug 2016 – May 2017
Quantitative analyst - Internship
- Helping managers analyzing current market trend by sentimental analysis in financial news with web crawling and natural language processing methods and back-test an event-driving trading strategy.
- Improve the Sharpe ratio by 40% comparing to traditional linear risk factors model by using trading strategy with machine learning methods (AdaBoost) to implement factor investing on China A stocks.
- Improve visualization of factors performance and explanation of current market trends by constructing a front-end website on Linux server for portfolio managers.

ADDITIONAL INFORMATION

SAS Certified Base Programmer for SAS 9 Credential — 2017
C++ certified programmer for financial engineering by UC Berkeley — 2015