TIANSHU YUAN ryanyuan42@gmail.com
Raleigh, NC (919) 272-9925 www.linkedin.com/in/tianshu-yuan-8a803614a/

QUANTITATIVE ANALYST

Quantitative finance professional with over ***5 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
- Machine Learning

EDUCATION

North Carolina State University, Raleigh, NC GPA: 3.91/4.0
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: 3.94/4.0
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: 3.60/4.0
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.

On the embedding vectors of node neighbors Fall 2017
- Introduced a novel framework called "Embedding++", in which node neighbors' embedding vectors are employed for link prediction task, showing state-of-art performance on public datasets.

PROFESSIONAL EXPERIENCE

Graham Capital Management, Rowayton, CT June 2018 – Aug 2018
Quantitative analyst - Internship
- Constructed historical volume bars from tick data and puts volume bars generation into production.
- Implemented visualization dashboard for back-testing and real-time visualization on volume bar price, alpha signals, position and back-testing PnL.
- Researched on high frequency features based on order book data and tick data through OneTick(OneMarketData), combine order book data and tick data to extract alpha signals, back-testing alpha signals across assets.
- Ensemble a series of machine learning models such as logistic regression, catboost, gradient descent boost tree and validate model on given financial dataset.

IC asset management, Shanghai, China May 2017 – June 2017
Quantitative researcher - Internship
- Implemented event-driven back-testing framework with the capability to handle minute-level commodity futures trading data, optimized framework through a file-based database to reduce consumed time.
- Implemented the Black-Litterman model via Copula Opinion Pooling approach, calibrate non-normal market distribution with investors' opinion through Monte Carlo simulations.
- Constructed 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
- Implemented sentimental analysis in financial news, web crawling news and modeling financial news using natural language processing methods, implemented event-driving trading strategy.
- Implemented trading strategy on China A stocks with machine learning methods such as AdaBoost to optimize portfolio management.
- Constructed front-end website on local Linux server, visualizing different factors' returns and its recent performance.

ADDITIONAL INFORMATION

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