# Tracy Zhou

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## **EDUCATION**

## Columbia University, Graduate School of Arts and Sciences

New York, NY

Master of Arts, Majoring in Mathematics of Finance

(Expected) Dec. 2017

• Core courses: Programming for Quantitative and Computational Finance(C++), Time-Series Modeling (R language), Intro to Data Science (R language), Fixed Income Portfolio Management, Numerical Methods (VBA)

## Wuhan University, Economics and Management School

Wuhan, China

Jun. 2016

Bachelor of Economics, Majoring in Financial Engineering

- GPA 3.75/4.0; Ranked top 10% in the class; Major GPA: 3.9/4.0;
- Outstanding Student Honor
- Core courses: Risk Management and Regulation, Security Investments, C programming application, MATLAB application, Econometric Modeling, Dynamic Optimization

#### **WORK EXPERIENCE**

ForwardLane Inc.

New York, NY

Quantitative Research Intern

Jan. 2017 - Present

- Completed a stepwise regression multi-factor model by including adjusted factors due to different closing time of investment portfolios and cross-market ETFs
- Optimized R code and developed an automated data retrieval function, reducing processing time by 40 times
- Implemented investment performance attribution analysis by testing 3000 mutual funds and ETF

## Hongkang Life Insurance Co., Ltd,

Beijing, China

Quantitative Analyst Intern, Asset Management Department

Jun. 2015 - Sep. 2015

- Extracted statistical data of long-term bonds and monetary market funds using Bloomberg terminal, VBA and C#
- Collaborated with 4 people and constructed a multi-factor model tracking the Shanghai Interbank Offered Rate overnight to detect capital market liquidity using R, improved accuracy by 5%
- Cooperated with technology team to wrap the code into a web application

#### **China Construction Bank (CCB)**

Chongqing, China

Credit Risk Management Intern, Corporate Finance Department

Jan. 2015 - Feb. 2015

- Researched and implemented credit repayment ability models to calculate key dynamics of 100 clients
- Developed an essential part of VaR model in MATLAB independently

## **RESEARCH & PROJECTS**

## Walmart Brick & Code Competition (Python)

San Bruno, CA

3<sup>rd</sup> Place Team, Data Scientist

Jan. 2017

• Constructed hypothetic data based on research and findings on problem statement, and analyzed costumer data discovering pain points in 30-hour case study and hackathon

## Neural Network Model Development and Implementation on High Frequency Data (R)

New York, NY

Columbia University

- Back-tested neural network model to fit 100 stocks' one-minute price data since 2006 using R, choosing the best bandwidth by minimizing statistical errors, and recorded prediction signal
- Compared its cumulative performance with buy and hold strategy, ARMA-GARCH model and Loess function

## Fixed Income Portfolio Management (VBA/Bloomberg)

New York, NY

• Managed a virtual \$500 MM bond portfolio achieving annualized return rate of over 5%, hedging DV01 and Convexity using swaps, bond futures, Eurodollar futures and implemented different trading strategies including flattener, steepener, and butterfly

## **SKILLS & INTERESTS**

Language: Chinese (native), English (fluent)

Technical Skills: C/C++ (2-year), R(2-year), VBA(2-year), Python, C#, Bloomberg, STATA, SQL

Interests: Violin (14 years), Skating, Yoga