

RUCHUANG GAO

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EDUCATION

Columbia University, Graduate School of Arts and Sciences

New York, NY

M.A. in Mathematics of Finance

Sept. 2016-Expected Dec. 2017

- Coursework : Stochastic Process-Application I, Programming for Quant and Computational Finance(C++), Statistical Inference / Time-Series Modeling(R&ITSM), Introduction to Mathematics of Finance (Matlab)

Fudan University, School of Economics

Shanghai, China

B.A. in Mathematical Economics

Sept. 2012 -June. 2016

- Cumulative GPA: 3.5/4.0, Major GPA: 3.65/4.0
- Related Coursework: Matlab Programming, C programming, Financial Engineering (Matlab), Principles of Mathematical Analysis, Time Series Analysis (SAS)
- Academic Excellence Scholarship (2012-2013, 2014-2015)
- GRE: Quantitative - 170 (98%) Verbal - 160 (85% percentile)

University of California, Berkeley, Haas School of Business

Berkeley, CA

Summer Program

July. 2014 -Aug. 2014

- Related Coursework: Introduction to Finance & Accounting (Fraud)

PROFESSIONAL EXPERIENCE

Essence Securities Co., Ltd

Shanghai, China

Strategy Analysis Assistant

Sept. 2015-Dec. 2015

- Implemented Web Crawler using Python to extract structured daily trading data and updated policies
- Remarkd on the Q3 results of 10 listed companies, used relative valuation models and the DCF models to evaluate potential investment opportunities
- Conducted research on the impact of new policies on macro-economy and target industries

Industrial Securities Co., Ltd

Shanghai, China

Quantitative Analysis Intern

Mar. 2015-June. 2015

- Assisted in designing quant stock selection models using C++ and back tested them using historical data
- Conducted research on the transaction data to measure risk of the portfolio, implemented a Monte Carlo based model with C++ and Excel VBA for portfolio return scenario analysis
- Created three new indicators, leveraged multi-factor model and regression methods to get weekly or monthly frequency trading strategies, collected historical data (2005-2015) to back-test new strategies (Python)
- Wrote Excel add-in functions for risk analysis such as VaR/CVaR

PROJECT EXPERIENCE

A Predictive Model of NYC Taxi Database (Python)

Dec. 2016-Jan. 2017

- The expected model can accurately predict the number of trips, the expected total fair and the tips ratio given the specific area, time slot and weather condition, with NYC taxi services
- Cleaned up the data; based on trip's pick up position coordinates and time, divided data into different area groups and time slots; merged to get the final training dataset
- Based on cross-validation methods, used Random Forest Regression and Gradient Boosting Regression Model to train the dataset, with an accurate predicting model and visualization of feather rank obtained

Fudan Securities Association

Shanghai, China

Analyst in Quantitative Strategy Group

Oct. 2013-Present

- Built and maintained a portfolio containing over 30 listed names with team members
- Performed regressions and back tests using Python to help improve our stock selection mechanisms
- Analyzed the arbitrage strategy of Chinese structure fund and used Python to implement the trading strategies

SKILLS

- CFA level II candidate
- Proficiency with Python, Excel/VBA, C/C++, MATLAB, Bloomberg
- Good command of R, SAS, SQL

INTERESTS

- Road Cycling: rode over 200 kilometers a day for two times, attended over five road bicycle races