

Chengcheng Gu

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EDUCATION

University of Michigan, Ann Arbor, MI Sept. 2017-Present
M.S. in Quantitative Finance and Risk Management GPA: 3.7/4.0

Courses: Machine Learning, Financial Mathematics, Applied Statistics, Stochastic Analysis, Data Mining

East China Normal University, Shanghai, China Sept. 2013-Jun. 2017
B.S. in Mathematics and Applied Mathematics (Minor in Finance) GPA: 3.7/4.0

Courses: C++/Python Programming, Probability, Statistics, Real/Complex Analysis, Micro/Macroeconomics

PROFESSIONAL EXPERIENCE

MX Capital, Shanghai, China May. 2018-Aug. 2018
Quantitative Researcher Intern

- Constructed both Market Taking and Making trading strategies on high-frequency data using multi-dimensional Hawkes Process, covering commodity futures, stock index futures and crypto currency futures
- Designed back-tests including performance testing and optimization of parameters using Genetic Algorithm with Python and R
- Back-test on Bitcoin future strategy resulted in over 30% expected annual yield with \$1M open position
- Assisted programmer in developing new API

Guolian Securities, Wuxi, China Sept. 2016-Mar. 2017
IBD Quantitative Intern

- Did data cleansing and basic data processing
- Built Multi-Factor Model to do stock selection, based on each security's performance on stock market as well as its financial reports and industry performance
- Tuned models by filtering efficient factors and do prediction using logistic regression with Python

Nielsen Co, Shanghai, China Jun. 2016-Aug. 2016
Financial Market Analysis Assistant

- Researched to learn about financial products, wrote proposal for a prospective project
- Designed questionnaires to be distributed before and after the project
- Used PowerPoint charts and graphics to conduct horizontal and vertical comparisons, analyzed the project effects through data comparisons, made recommendations for improvement

PROJECT EXPERIENCE

Michigan Quant Lab Sept. 2017-Present

- Implemented Python to carve portfolio risk profile by applying Monte-Carlo simulation of risk factors and EWMA volatility estimation scheme
- Made prediction of NASDAQ index using GARCH model via R, selected model using AIC and performed diagnostics by checking the properties of residuals

Research on deep learning in quantitative investment Jan. 2018-Apr. 2018

- Analyzed different deep learning models' feasibility in predicting future price and collected data of a stock index future in China
- Applied SVM and BP-Neural Network Model respectively on the data and compared their performance in Python

Bathtub Water Efficiency Model Feb. 2016

- Built a Temperature-Water Velocity model, a Double-Layer Media model, and a Grid Segmentation model in Matlab to study heat conduction and determine the position and velocity for adding hot water
- Applied Brownian Motion to predict movement of hydrone
- Won Meritorious Winner Prize in MCM/ICM

SKILLS

- Programming and data processing tools: Python, R, C++, Matlab