Guoqing Zhao

gqzhao@umich.edu | (734) 274-0583 | 2372 Stone Road Ann Arbor, MI 48105

EDUCATION

University of Michigan Sept.2017 - Dec.2018

M. S. in Quantitative Finance and Risk Management *GPA: 3.77/4.00*

- **Courses:** Financial Mathematics, Stochastic Processes, Numerical Methods with Financial Applications, Statistical Learning: Regression, Stochastic Analysis for Finance, Machine Learning, Statistical Models and Methods for Financial Data, Computational Finance

Xi'an Jiaotong University Sept.2013 - Jun.2017

B. S. in Mathematics and Applied Mathematics (Honors Science Program) *GPA: 84.86/100*

- **Courses:** Numerical Analysis, Probability and Mathematical Statistics, Mathematical Finance, Stochastic Processes, Mathematical Programming, Data Analysis and Statistical Software (SAS).
- **Honor:** SIYUAN Merit Scholarship in 2017

Georgia Institute of Technology Jan.2016 – May.2016

Georgia Tech School of Mathematics Visiting Honors Student Program *GPA: 4.00/4.00*

- **Courses:** Probability and Statistics with Application, Information Theory.

PROJECT EXPERIENCE

Parameter Estimation of Quantile Regression for Longitudinal Data Feb.2017 - Jun.2017

- Constructed several different weights in R to the loss function of nonlinear quantile regression
- Applied the induced smoothing method in R to smooth the original discontinuous estimating functions, and used the Newton-Raphson iteration algorithm to solve the estimating equations

Prediction of Stock Price Based on LSTM Model Jan.2016 - May.2016

- Analyzed the impact of news and blogs on stock prices using sentiment analysis in python
- Fitted LSTM model with 5 years historical data
- Tested the model with stock prices and articles in 2 months. The final accuracy is more than 89% for sentiment word where only 56% for stock price

Prediction of China's Population Based on ARMA Model Jul.2015 - Sept.2015

- Analyzed the station process of Chinese population data within 20 years in Eviews
- Tested stationary data with white noise and calculated ACF and PACF
- Built model with ARMA to predict the Chinese population in coming years. The error of the model was within one in a million

INTERNSHIP EXPERIENCE

Eastmore Management, LLC May.2018 - Aug.2018

Quantitative Researcher, Intern *New York, NY*

- Researched mathematical principles of LSTM model, with its improvement relative to RNN.
- Fetched and cleaned cryptocurrency order book data, tested strategy effectiveness with historical data and validated with live data.
- Predicted price tendency of top-traded cryptocurrency with LSTM model in python.

SKILLS

Programming: MATLAB, SAS, Python, R, C++.