

# Mengyao Huang

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## EDUCATION

### University of Michigan

*M.S. in Quantitative Finance and Risk Management*

**Ann Arbor, MI**

*Sep.2017-Present*

### Dalian University of Technology

*B.S. in Mathematics and Applied Mathematics & B.S. in Finance GPA:3.6/4.0*

**Dalian, China**

*Sep.2013-Jun.2017*

- Courses: C/C++ Programming, R Programming, Stochastic Process, Optimization Method, Financial Mathematics, Time Series, Econometrics, Micro/Macroeconomics, Financial Risk Management
- Awards: First Prize in Mathematical Contest in Northeastern China; Technological Innovation Scholarship

## WORKING PAPER

### Complex Ecosystem Evolution Model Study and Construction (Accepted by Physical Review A)

- Joint first authors, Advisor: Associate Prof. Qiuhui Pan

### Optimal Model of Asset Liability Management based on Risk Control of Stock and Increment (in progress)

- Third author, Advisor: Prof. Guotai Chi

## PROFESSIONAL EXPERIENCE

### BOHAI Securities Co., Ltd

*Assistant Researcher, Quantitative Trading Division*

**Tianjin, China**

*Jul.2016-Aug.2016*

- Implemented trading strategies through MATLAB and C coding, verified the feasibility and improved models
- Improved the stability of algorithm in two research reports titled Weighted Fourier Algorithm for Long-term Forecasting & The Cycle and The Period of Financial Market
- Combined Fast Algorithm for DFS, ARMA model and Fourier functions to improve profitability of quantitative timing model algorithm

### AXA Group, Hong Kong Branch

*Assistant Analyst, Market Research Department*

**Hong Kong, China**

*Jan.2016-Feb.2016*

- Developed stock investment strategies, predicted Hang Seng Index and established basic hedge fund portfolio

## PROJECT EXPERIENCE

**Optimal Model of Asset Liability Management based on Risk Control of Stock and Increment** *Nov.2015-present*  
*Researcher* Advisor: Prof. Guotai Chi, School of Management and Economics, DUT

- Realized simulation for risk measurement about CVAR calculation with MATLAB
- Analyzed credit rating transition matrix, robust optimization and Worst-CVAR

### Quantitative Trading Research Laboratory

*Researcher* Advisor: Yiwei Liu, School of Innovation and Entrepreneurship, DUT

*Sep.2016-Jun.2017*

- Reviewed arbitrage strategies of high-frequency futures on PhD thesis
- Picked strategies for implementation and made simulation risk trading analysis

### Mathematical Modeling Training Program

*Sep.2013-Jun.2016*

*Member & Researcher*

- Learned models covering ecosystem evolution, dissemination of opinions and public goods games
- Established Stochastic Diffusion models and realized Monte Carlo computational simulation

### Complex Ecosystem Evolution Model Study and Construction

*Mar.2015-May.2016*

*Researcher* Advisor: Associate Prof. Qiuhui Pan, School of Innovation and Entrepreneurship, DUT

- Raised energy accumulation formulas and partial differential equations to measure the complexity
- Analyzed data and realized Monte Carlo computational simulation using MATLAB & R language

## SOCIAL ACTIVITIES

### DUT Mathematical Modeling Association

*President*

**Dalian, China**

*Sep.2015-Sep.2016*

- Set up publicity and technology committees, organized lectures on campus and recruited new members

## SKILLS

**Programming and data processing tools:** MATLAB, R, C/C++, Python, Lingo, EVIEWS, Minitab

**Communication:** Native in Mandarin; Fluent in English