

# Yue Ruilong

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## EDUCATIONAL BACKGROUND

**Tsinghua University, Dept. of Industrial Engineering**

Beijing, China

Industrial Engineering B.Eng., minor in Statistics

2015.8-Present

- **GPA:** 3.66/4      **Rank:** 7/54      Most math courses > 90 (top 20%)
- **Scholarship:** National Endeavor Fellowship, Scholarship of Academic Excellence, Scholarship of Outstanding Volunteers
- **Courses:** Operations Research(1-3); Introduction to Data Science, JAVA and Object-Oriented Programming, Numerical Analysis, Data Structure and Algorithm Analysis; Engineering Economy, Database Concepts, Modeling and Simulation; Multivariate Statistics Analysis, Linear Regression Analysis, Experimental Design, Applied Time Series Analysis, Financial Statistics, Reliability Data and Survival Analysis
- **Courses (taking):** Convex Optimization, Introduction to Mathematical Physics Equations, Statistical Calculation, Stochastic Process, Stochastic Analysis

## RESEARCH PROJECT

**A Solution to Big-data Dynamic Portfolio Selection Problem with No-shorting Constraints** 2018.7-2018.10

*Instructor: Hoiying, Wong, Professor, Department of Statistics, Chinese University of Hong Kong*

- Self-studied stochastic calculus, optimal control, high-dimensional statistics and other knowledge. Analyzed the viscous solution of portfolio problems under short-selling constraints. Calculated the theoretical and estimated statistics of terminal wealth, and proved its convergence properties. Finding a key factor affecting convergence, a new method (NSLPO) was proposed to implement strategies with high-dimensional data.
- Used simulation and empirical research methods to study the convergence properties and effects of NSLPO, and compared the results with LPO results in markets with and without strict short-selling restrictions. And am trying to organize the results to a paper.

## COURSE PROJECT

**Time Series Modeling Analysis of Beijing Housing Price,**

2018.6-2018.7

*Instructor: Dong Li, Associate Professor, Center for Statistical Science, Tsinghua University*

- Crawled the monthly house price, quarterly GDP for descriptive analysis. An ARIMA model was fitted and test for house price, and parameter estimation and model diagnosis were performed.
- Performed outlier detection on the model, extracted external interventions and included them in the model. Forecasted housing price change and explored the relationship between house prices and GDP changes.

**An Empirical Study of Asset Pricing Model in China,**

2017.11-2017.12

*Instructor: Dong Li, Associate Professor, Center for Statistical Science, Tsinghua University*

- Verify the CAPM, APT and multi factor models. The investment strategy was realized by python. Did the optimization on maximum Sharpe rate and minimum variance, and the revenue of 200%-400% was obtained.

## SOCIAL ACTIVITIES

**Global South Culture Immersion Program UGM-Tsinghua University**

Yogyakarta, Indonesia 2017.9

- Put forward questions and suggestions. Got appreciations for research ability and outstanding performance.

## ADDITIONAL INFORMATION

English: with overseas experience, proficient in reading and writing, fluent listening and speaking ability

Skills: **R(10 projects), LaTeX, python, MATLAB, SAS, C, Java, MySQL, CPLEX, Minitab, Microsoft Office**

Extensive interest: swimming, table tennis (department team member), reading and “modern style” poetry, etc.