Jiaxi Li

Phone: (+1) 704-677-9800 | Email: lijiaxi1995@gmail.com|

Address: Department of Economics CB# 3305, 107 Gardner Hall University of North Carolina Chapel Hill, NC, 27599 | SSRN Author Page: https://ssrn.com/author=4509186 | Website: https://jiaxili1995.github.io/

Education

The University of North Carolina at Chapel Hill   August 2021 - Now

Ph.D. in *Economics*

Field: Financial Econometrics, Asset Pricing

The University of Chicago   September 2018 – August 2019

Master of Arts in *Economics* (**GPA** 3.69) | **Honor**: MAPSS Scholarship

Relevant Courses: Theory of Financial Decisions, Advanced Econometrics, Time Series Forecasting, Asset Pricing, Financial Statistics, Behavioral Finance, Data Analysis with R

The University of North Carolina at Chapel Hill   August 2014 - May 2018

Bachelor of Science in *Applied Mathematics* (**GPA**: 3.92) & *Economics* (**GPA**: 3.90), Minor in *Statistics and Analytics*, Credential in *Quantitative Financial Economics*

Honor: Graduate with Distinction, Dean's List, Economics Honor's Thesis, Herbert Brown Mayo Fund in Economics

The University of Tübingen (Germany Exchange)   March 2017 - July 2017

Major: *German Studies & Economics and Business Administration* | **Honor**: Baden-Württemberg Stipendium

Achievement and Award

- CFA Level I Certification   December 2019
- Carolina Economics Club Officer   Fall 2016
- UNC Chinese Student Graduation Dinner Host   Summer 2016
- 54th place in Virginia Tech Regional Mathematics Contest (1st place at UNC Chapel Hill)   Fall 2015
- 273.5th place in Putnam Mathematics Competition (2nd place at UNC Chapel Hill)   Fall 2015

Research Experience

A Tensor PCA Analysis on Intraday Returns | R, Factor Model, Simulation   May 2023 – December 2023

Field Paper Requirement for Economics Ph.D., advisors: Eric Ghysels and Andrii Babii, additional committee member: Peter Hansen

- Analyzed intraday stock return data using Tensor PCA developed by Babii et. al. (2022)
- Showed with simulation that a combination of small sample, severe intraday heteroskedasticity and large noise can lead to large bias in the estimation
- Provided a weighted version of TPCA can mitigate this problem in both simulation and with real data
- Available at: https://jiaxili1995.github.io/

Industry Equity Capital Costs | R, Factor Model, Simulation   July 2020 – July 2022

Co-author with Prof. Mike Aguilar and Prof. Robert Connolly

- Improved the estimation of Expected Factor Risk Premium on the Industry Equity Capital Costs with filtered Fama Macbeth cross-sectional regression
- Conducted KS test and decomposition of Equity Capital Costs to address the importance of Factor Risk Premium in Equity Capital Cost Estimation
- Designed a Random Fourier Simulation to demonstrate the performance of the filtering method
- Available at: https://ssrn.com/abstract=3742221

REITs | R, Shiny App   December 2019 - July 2022

Research Assistant/Co-author with Prof. Mike Aguilar and Prof. Robert Connolly

- Conducted Research on the evolution of REIT's Capital Equity Costs
- Applied the Fama French 5 Factor Model to compute the Capital Equity Costs and used ggplot to visualize the results
- Employed CvM test to examine whether the distribution of the Capital Equity Costs changed annually
- Designed and developed a Shiny App to automate the calculation and to democratize the analysis of REITs data (https://lijiaxi.shinyapps.io/REITs_app/)

ESG | MATLAB, Event Study   October 2018 – August 2019

Master's Thesis in Economics, advisor: Prof. Eugene Fama

- Matched CRSP and RepRisk into a joint Dataset, which contained daily information of 2048 US public listed firms from 2006 to 2018 with 13508 rate changing events
- Implemented Event Study technique with the Market Model to measure the Abnormal Return generated by ESG rate changes

Matching | MATLAB, Simulation   September 2017 - May 2018

Bachelor Honor's Thesis in Economics, advisor: Prof. Stephen Lich-Tyler

- Explained why more accurate information can prolong the matching process
- Designed a "Pizzazz" Marriage Matching Model and estimated the matching timing with the Monte Carlo Simulation

Monetary Policy | MATLAB, Vector Autoregression   May 2016 - August 2016

Summer Research, advisor: Prof. Mike Aguilar

- Investigated whether the Chinese Monetary Authority exercised its policy to manipulate its stock market
- Used the Vector Autoregression to overcome the simultaneous causality problem and to extract the

effect of Chinese Stock Market Returns on the Federal Funds Rate

Experience

Market Observatory   December 2020 - Present

Co-founder; Scientific Project Manager

- Help organize the Research Assistants and manage the platform
- Attend and contribute to the meetings
- Assist fellow Research Assistants with concepts and code
- Standardize the data cleaning process and output format for the project
- Improve the code efficiency

Easyke Online Tutorial   September 2019 - Present

Live Tutorial Tutor; QA Moderator

- Tutored more than 1300 hours of advanced college-level Economics, Finance, and Mathematics courses with 9.93 satisfaction; received tutor of the month
- Motivated and guided students to apply the theoretical models to analyze the current events such as the Trade War, Fiscal and Monetary Policies, Coronavirus, and Financial Market Fluctuation
- Led the student to achieve a deep understanding of advanced concepts with the Inquiry-based and Personalized Learning
- Created detailed Lesson Plans and Post-lesson Assessments for all 800 classes

The University of Chicago Booth School of Business, Chicago, IL   April 2019 – June 2019

Teaching Assistant

- Planned and taught 1-hour weekly help sessions for Introduction to Finance class
- Provided solutions and graded homework and exams

The University of North Carolina at Chapel Hill, Chapel Hill, NC   August 2014 - May 2018

Teaching Assistant

- Provided in-class help for the Macroeconomics class (Fall 2016 and Fall 2017) and Calculus II class (Fall 2016)
- Held 1-hour review sessions for the Macroeconomics classes
- Graded homework and exams
- Worked at the Math Help Center and Economic Help Center to answer student's questions

Skills

- Languages:
  - Proficient: Mandarin and English

- o   Intermediate: German
- Computer Languages:
    - o   Proficient: Matlab, R, Excel
    - o   Intermediate: SQL, Stata, Latex and Mathematica
- Data Skills:
    - o   Web Scraping and API (R), Text Analysis, Linear Programming and Quadratic Programming (Excel)
    - o   Statistical Analysis, Machine Learning, Time-series Modeling
    - o   Geospatial visualization (R), Shiny App (R; sample: https://lijiaxi.shinyapps.io/trade_shiny/)
- Others: Public Speaking, Critical Thinking, Problem Solving, Quick Learning, Teaching and Teamwork