Ask Brett for recommendation letter - could not be attached February 15, 2024

Shira Li
28 Dewolfe Street
594 Leverett Mail Center
Cambridge, MA 02138

Dear NBER Entrepreneurship Summer Bootcamp Selection Committee,

Please see the above header for my mailing address. I can also be reached by email at shirali@g.harvard.edu and phone number at 973-303-2226.

My recommendation letter writer is Professor Mark Egan from Harvard Business School.

I have attached a one-page essay describing my current and future research interests my interest in attending the bootcamp. I have also attached a copy of my CV and transcript, which includes all the classes I have taken through my second-year of the PhD.

Thank you for your consideration!

Sincerely,
Shira Li

I am writing to express my strong interest in attending the NBER Entrepreneurship Summer Bootcamp. As a Ph.D. candidate in Business Economics at Harvard University with a focus in finance, industrial organization, and market design, I believe that this program will provide a unique opportunity for me to deepen my understanding of the research frontier in the economics of entrepreneurship and illuminate how entrepreneurship can play a pivotal role in consumer financial markets.

Attending the NBER Entrepreneurship Summer Bootcamp is crucial for my academic and research development. I am currently completing second-year field courses in empirical corporate finance, industrial organization, and public economics as well as auditing Professor Josh Lerner's course on entrepreneurship. The structure of this bootcamp, with two lectures of three hours each day, will offer an intensive and immersive learning experience that will allow me to delve deeper into the entrepreneurship topics covered my current coursework and accelerate research idea generation going forward. I am particularly excited to hear from distinguished scholars such as Nick Bloom, Antoinette Schoar, and John Haltiwanger among others, who will provide a comprehensive understanding of the key issues and recent advancements in entrepreneurship research. Furthermore, I am excited to expand my network within the academic community and engage in meaningful discussions with fellow students who share a passion for studying entrepreneurship.

Prior to graduate school, I worked at Goldman Sachs as a mortgage trader for three years. As a result, I am particularly interested in the impact of financial firms on their employees and consumers. Under the guidance of Professor Mark Egan, my current research explores the impacts of harassment on career progression and retention in the financial sector. Going forward, I hope to tackle research questions relating to the impact of fin-tech innovation and entrepreneurship and AI for consumer credit offerings.

One area that I hope to pursue research in is the expansion of digital lending and shadow banking for single-family mortgages. In particular, I hope to understand the effects of digital lending on consumer welfare. On one hand, borrowers might be more efficient at refinancing during periods of lower rates with digital lenders. On the other hand, digital lenders might be overly aggressive and churn consumers through predatory refinancing, resulting in greater fee generation for the lender but less money saved for the borrower per refinance. Furthermore, I am interested in the strategic responses from the traditional bank community in response to these new market competitors.

Another area I hope to tackle is the impact of AI startups on the financial industry. Many banks are interested in how large language models could transform business practices such as voice trading or client management. However, banks are also concerned about keeping their information and models proprietary for competitive concerns, which is in contrast to many other firms in the tech industry, who more willingly share their data with large language model providers like Microsoft and OpenAI. As a result, I am interested in understanding how business practices and firm strategy evolves over time as AI startups provide services to banks and penetrate industries differentially.

Attending the NBER Entrepreneurship Summer Bootcamp will not only enhance my knowledge and research skills in the field of entrepreneurship but will also provide me with a platform to share my ideas and engage with like-minded scholars and experts in the field. I am confident that the insights gained from this program will significantly contribute to the advancement of my future research pursuits.

Thank you for considering my application. I look forward to participating in this opportunity!

Shira Li

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28 DeWolfe Street
Cambridge, MA 02138

(973) 303-2226
shirali@g.harvard.edu
shiraxli.github.io

Education

Ph.D. Business Economics, Harvard University and Harvard Business School, expected May 2027

Fields: Finance, Industrial Organization, Market Design (GPA 3.88/4.00)

A.B. Mathematics and Computer Science, secondary in Statistics, Harvard University, 2019

Magna cum laude with Highest Honors (GPA 3.87/4.00)

Awards, Honors, Fellowships

Finalist, Paul and Daisy Soros Fellowship for New Americans, 2022

Thomas Temple Hoopes Prize (Senior Thesis), 2019

Friends of Harvard Mathematics Award (Senior Thesis), 2019

Navid Saheb Mathematics/Physics Prize (selected in Eliot House), 2019

Program for Research in Markets and Organizations (PRIMO) Fellowship, Harvard University, 2017

Top 12 Semi-Finalist Team (out of 200+), Goldman Sachs Analyst Impact Fund, 2021

Research Experience

Doctoral Work in Progress

Impacts of Harassment on Financial Sector Labor Outcomes, with Professor Mark Egan, Summer 2023 - Present.

We study the labor outcomes for employees who have been either victims or offenders of harassment and discrimination in the financial industry. Preliminary results show that victims typically move out the industry at much higher rates, while offenders stay entrenched within the financial sector.

Salience of Bankruptcy/Foreclosure for Household Financial Expectations, with Sarah Robinson, advised by Professors David Laibson and Andrei Shleifer. Spring - Summer 2023.

We study the salience of foreclosure and bankruptcy as significantly negative financial events in the memory model of belief formation and their impact on future attitudes towards savings, investment, and inflation using Survey of Consumer Finances (SCF) and Panel Study of Income Dynamics (PSID) data from 2011-2019.

Pre-Doctoral Conference Papers and Research

Deep Learning for Two-Sided Matching, with Sai Ravindranath, Zhe Feng, Jonathan Ma, Scott Kominers, and David Parkes. arXiv [cs.GT]. http://arxiv.org/abs/2107.03427. **Presented at MATCH-UP 2022, submitted to AAMAS 2024**. *(Extension of Undergraduate Senior Thesis advised by Scott Kominers, David Parkes, Clifford Taubes)*

We use a multi-layer neural network to model two-sided matching and to explore the design space between strategy-proofness and stability, which cannot be achieved simultaneously but whose efficient frontier is not understood. We show empirically that it is possible to achieve a good compromise between stability and strategy-proofness substantially better than that achievable through a convex combination of deferred acceptance (stable and strategy-proof for only one side of the market) and randomized serial dictatorship (strategy-proof but not stable).

Manipulability of Deferred Acceptance with Fixed Preference Truncation, with Yunseo Choi, advised by Scott Kominers. Summer 2017 - Present.

Pathak and Sonmez (2013) propose a method to compare mechanism's vulnerability to manipulation and show less truncation of preference lists result in less manipulable deferred acceptance mechanisms. We fix the truncation length of a preference list, and compare relative manipulability of mechanisms given minority quotas, entrance of new students to the district, and students lowering the cutoff for acceptable schools.

Random Serial Dictatorship (RSD) for Seminar Allocation, Summer 2017. *Program for Research in Markets and Organizations (PRIMO) with Professor Scott Kominers*

We developed a course allocation algorithm using market design frameworks to improve economics junior seminar matching outcomes and reduce the number of students receiving their lowest-ranked choice by 75%.

Work Experience

Agency Mortgage Trader, Associate, Goldman Sachs. Summer 2018, 2019 - 2022.

Managed risk of multi-billion dollar portfolio of specified pools, collaterized mortgage obligations (CMOs), and derivatives. Independently researched and implemented trade ideas earning $3M+ in profits. Developed pricing tools for calculating CMO/derivatives arbitrage based on collateral and deal structure utilizing Intex, Yieldbook, and Bloomberg. Priced and executed trades with domestic/overseas institutional clients. Leveraged RiskSpan and eMBS data to author monthly prepayment reports sent to 1000+ clients.

Research Assistant, Harvard Business School, Summer 2017.

Data Analytics Associate, 270 Strategies (Political Consulting Firm), Summer 2016.

Summer Schools and Service

Co-Organizer, Harvard Finance Reading Group, Fall 2023 - Present

Finance Theory Group Summer School (University of Washington, Foster School of Business), Summer 2023

Program for Research in Markets and Organizations (PRIMO) Doctoral Tutor, Summer 2023

Mentorship and Activities

Resident Tutor (STEM, Pre-Career, Intramural Sports), Leverett House, Fall 2023 - Present

Non-Resident Tutor (STEM, Pre-Career), Eliot House, Fall 2022 - Spring 2023

Co-Captain and Choreographer, Harvard Asian American Dance Troupe, 2016-2019

Teaching

Volunteer SAT Tutor for low-income students, Apex For Youth, 2021

Course Assistant for ECON1033: Economics of Networks (w/ Benjamin Golub), Spring 2019

Teaching Fellow for STAT110: Introduction to Probability (w/ Joe Blitzstein), Fall 2017

Course Assistant for MATH23A/B: Linear Algebra & Multivariable Calculus (w/ Anand Patel), Fall 2016, Spring 2017

Technical Skills

Experience with Python, R, Stata, Julia, LaTeX, VBA, Microsoft Office, Bloomberg

Harvard University

Cambridge, Massachusetts 02138

Harvard Kenneth C. Griffin Graduate School of Arts and Sciences

Li, Shira

HUID: **10977193**

Good Academic Standing

Beginning of Harvard Kenneth C. Griffin Graduate School of Arts and Sciences Record

2022 Fall

Program: Doctor of Philosophy
Subject: Business Economics

Course	Description	Earned	Grade
ECON 2010A	Economic Theory	4.000	A-
ECON 2010C	Economic Theory	4.000	A-
ECON 2120	Principles of Econometrics	4.000	B+
ECON 2922	Early-Stage Research and Discussions on Urban Economics	4.000	A
HBSDOC 4918	Reading Group on Topics in Financial Economics	4.000	A

2023 Spring

Program: Doctor of Philosophy
Subject: Business Economics

Course	Description	Earned	Grade
ECON 2010B	Economic Theory	4.000	A
ECON 2010D	Economic Theory	4.000	A
ECON 2030	Psychology and Economics	4.000	A
ECON 2140	Econometric Methods	4.000	A-
HBSDOC 4918	Reading Group on Topics in Financial Economics	4.000	A

2023 Fall

Program: Doctor of Philosophy
Subject: Business Economics

Course	Description	Earned	Grade
ECON 2000	Introduction to Quantitative Economics	4.000	A
ECON 2610	Industrial Organization I	4.000	A
ECON 2723	Asset Pricing	4.000	A
ECON 2725	Corporate Finance and Banking	4.000	A
HBSDOC 4918	Reading Group on Topics in Financial Economics	0.000	

2024 Spring

Program: Doctor of Philosophy
Subject: Business Economics

Course	Description	Earned	Grade
ECON 2003	Computing for Economists		
ECON 2060	Contract Theory		
ECON 2450B	Public Economics and Fiscal Policy II		
ECON 2611	Industrial Organization II		
ECON 2726	Theoretical and Empirical Perspective on Entrepreneurship		
ECON 2727	Empirical Methods in Financial Economics		

End of Harvard Kenneth C. Griffin Graduate School of Arts and Sciences Record

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Erika J. McDonald, Registrar
Not official unless signed and sealed