Ziyuan Liu
Ph.D. Student, Georgia State University

Contact Information:
Email: zliu37@gsu.edu
Phone: (404) 554-6341

School: Georgia State University

Research Interests:
Entrepreneurship, Corporate Finance, Industrial Organization, Labor Economics, Innovation and Artificial Intelligence

PhD Entry Year: 2024

Expected Completion: 2030

Letter of Recommendation:
Prof. Vikas Agarwal

ZIYUAN LIU

35 Broad St., Atlanta, GA, 30303
zliu37@gsu.edu (1)404-554-6341

Education

Georgia State University, United States ***Aug.2024 - Present***
Ph.D. Student in Finance

Queen's University, Canada ***Aug.2023 - Aug.2024***
M.Sc.in Finance

University of Macau, Macao SAR, China ***Aug.2019 - Jun.2022***
M.Sc.in Finance

Sichuan Agricultural University, P.R. China ***Sept.2015 - Jun.2019***
B.Sc.in Financial Management
B.Sc.in Geographical Information Science

Research Interests

Entrepreneurship, Corporate Finance, Industrial Organization, Labor Economics, Innovation and Artificial Intelligence

Working Papers

Artificial Intelligence and Entrepreneurial Reallocation 2026 (expected)
Life Quality and Headquarters' Productivity 2026
Does a Carbon Emissions Premium Exist? 2024
Does Gender Diversity Promote Corporate Social Responsibility? 2022
Governance Pathways to Carbon Neutrality (Net Zero) in Hong Kong and Global Capital Markets 2022
Analysis of Land Use Area Change and Driving Forces Based on GIS 2019

Awards and Fellowships

McCall MacBain Sustainable Finance Fellowship, Canada *2023*
Smith School of Business Fellowship, Queen's University *2023*
Outstanding Participant in Youth Research Leadership Summit *2021*
Outstanding Student in Characteristic Finance Training Course of Industrial and Commercial Bank of China *2020*
Sichuan College Students' Comprehensive Quality A level Certificate *2018*

Research Assistantship

Department of Finance, Georgia State University ***Aug. 2024 - Present***
Research assistant to Prof. Vikas Agarwal, Prof. Baozhong Yang, Prof. Hadiye Aslan, Prof. Manish Jha

Department of Public Policy, City University of Hong Kong ***Jun. 2022 - Dec. 2022***
Research Assistant to Prof. Liang Dong

Teaching Assistantship

Smith School of Business, Queen's University *Sept. 2023- Present*
Teaching Assistant, Comm 121, MFIT841

Faculty of Business Administration, University of Macau *Jan. 2020 - Jun. 2021*
Teaching Assistant, Department of Accounting and Information Management

Skills

Computer Skills: Stata, SPSS, SAS, R, Python, LaTeX, SQL, Mathematica
Language Skills: Mandarin (native), English (fluent), Cantonese (fluent)

Ziyuan Liu
Ph.D. Student
Department of Finance, Robinson College of Business, Georgia State University
February 2026

Research Statement – NBER Entrepreneurship Research Boot Camp Application

My research studies how general-purpose technologies reshape entrepreneurial equilibria, capital allocation, and firm boundaries. I focus on artificial intelligence (AI) as a technological shock that alters information structures, competitive dynamics, and investment incentives within entrepreneurial ecosystems. Rather than treating AI adoption as a disclosure event, I conceptualize it as a strategic decision under uncertainty that affects both market beliefs and real resource allocation.

In my current work, I examine how AI-related announcements function as equilibrium signals in product and capital markets. Firms that emphasize AI may convey private information about technological capability or strategic repositioning. These signals can alter rivals' entry decisions, investment timing, and competitive intensity, while also affecting suppliers' production choices and customers' demand expectations. I analyze responses across competitors, suppliers, and customers to identify whether AI announcements deter entry, induce strategic complementarity, or generate spillovers that propagate through vertical linkages and reshape industry structure. This approach allows me to study how technological narratives diffuse through interconnected firms rather than operate in isolation.

A second component of my research investigates the mapping from signalling to real investment. Capital markets frequently react to AI disclosures, but it remains unclear whether these price responses reflect genuine productivity-enhancing investment or strategic narrative positioning. I test whether firms that emphasize AI subsequently raise capital and, crucially, whether that capital is allocated toward innovation and operational transformation. This distinction enables me to separate technological adoption from rhetorical signalling and to evaluate the disciplining role of financial markets in screening credible technological entrepreneurship.

A third strand of my research examines organizational adjustment and task reallocation within firms. AI adoption may alter firm boundaries by substituting routine tasks while complementing new skill sets, thereby changing the optimal allocation of labor across tasks. I conceptualize these adjustments along both the internal margin, which reallocates workers across tasks within the firm, and the external margin, which involves hiring, layoffs, and entry into new occupational categories.

To capture these dynamics, I combine disclosure-based measures of AI emphasis with multiple sources of labor-market data. I use state-level WARN filings to measure large-scale layoffs and restructuring events. I complement this with Revelio data on LinkedIn job postings and employee resumes to track changes in occupational composition and skill intensity. This design allows me to examine whether firms expand AI-intensive roles, reallocate toward complementary skill sets, or contract non-AI positions following AI adoption. By linking technological signalling to both internal task composition and external labor flows, I study how firm-level adjustments contribute to broader labor reallocation in response to general-purpose technological shocks.

I construct novel firm-level measures of AI-related strategic emphasis using textual analysis of earnings calls and regulatory filings. I combine these measures with capital-raising activity, state-level WARN data on layoffs, and detailed labor-market data to trace how technological signals affect financing decisions and organizational reallocation. This integrated framework allows me to link technological signaling to investment, labor adjustment, and competitive dynamics across firms. More broadly, my research provides micro-level evidence on how information frictions and strategic signaling shape the diffusion of general-purpose technologies within entrepreneurial ecosystems.

This Boot Camp is well aligned with my research agenda because it focuses on entrepreneurial decision-making under uncertainty, innovation, and firm dynamics. I conceptualize AI adoption as a strategic response to technological shocks and seek to deepen my understanding of how entry, competition, and capital allocation adjust in equilibrium. Exposure to frontier research in entrepreneurial economics would strengthen the theoretical foundations of my empirical framework and refine how I model signaling and resource reallocation. I expect the Boot Camp to play a pivotal role in refining the theoretical and empirical foundations of this research program.

VIKAS AGARWAL
Distinguished University Professor of the
University System of Georgia
Bank of America Distinguished Chair
and Professor of Finance

Georgia State University
J. Mack Robinson
COLLEGE of BUSINESS

OFFICE
35 Broad Street, Suite 1234
Atlanta, Georgia 30303
404.413.7326 (office)
404.413.7312 (fax)
https://sites.google.com/view/vikasagarwal

February 17, 2026

Selection Committee
NBER Entrepreneurship Research Boot Camp
National Bureau of Economic Research

I am pleased to recommend Ms. Ziyuan Liu for admission to the NBER Entrepreneurship Research Boot Camp 2026. Ziyuan is a second-year Ph.D. student in Finance at Georgia State University. She has completed more than one year of coursework in finance and economics, which makes her eligible to apply for the Boot Camp. She has worked closely with me for the past year and a half as my graduate research assistant. During this time, she has consistently demonstrated strong work ethic, and enthusiasm and motivation to help me with my research.

For one of my research projects, Ziyuan helped in constructing a novel dataset based on more than 200 issues of the *Robinhood Snacks* financial newsletter. She systematically tracked firm-level stock mentions, which would be useful in examining how these mentions are associated with subsequent trading activity of retail investors and market outcomes. This work required careful text processing and rigorous data cleaning. She executed these tasks with notable rigor and independence, requiring minimal supervision.

In another project, she helped me identify hedge funds in large-scale institutional holdings data. This involved complex entity-matching, integrating structured and unstructured information about institutions, and developing systematic classification procedures. Her ability to process messy financial datasets to construct machine-readable data that can be used for empirical analysis, reflects strong technical competence.

In terms of her own research, Ziyuan is developing a clear and promising research agenda focused on how technological change reshapes firm behavior, entrepreneurial entry, and capital allocation. Her work connects financial market signals to real economic outcomes, including investment decisions and labor reallocation. At this stage of her doctoral training, the NBER Entrepreneurship Research Boot Camp is particularly well suited to her intellectual development. Its emphasis on entrepreneurial finance, firm dynamics, and innovation closely aligns with her evolving research trajectory. I am confident that she will be engaged in learning the course material, contribute thoughtfully to discussions, and benefit substantially from interaction with leading scholars in the field.

I give Ziyuan my strongest recommendation for admission.

I will be happy to discuss Ziyuan's application further if needed. Please do not hesitate to contact me at vagarwal@gsu.edu or at 404-413-7326 in case you have any questions.

Sincerely,



Vikas Agarwal
Distinguished University Professor of the University System of Georgia
Bank of America Distinguished Chair and Professor of Finance