Innovation Research Boot Camp Committee
National Bureau of Economic Research

Dear Committee Members,

I am writing to apply for the 2025 NBER Innovation Research Boot Camp. I am a PhD candidate at the University of Michigan's School of Information. My research focuses on how strategic content presentation in competitive markets affects resource allocation, with applications to scientific innovation and R&D productivity.

My job market paper intends to examine how competition in academia affects researchers' presentation of their work and the resulting economic costs. Using machine learning research as my empirical setting, where standardized benchmarks allow us to separate technical innovations from strategic presentation, I analyze how different competitive structures affect resource allocation and R&D productivity. This research builds on my previous work studying strategic presentation and visibility in competitive markets, including studies of the economics job market, crowdfunding, and news media.

The boot camp's comprehensive coverage of innovation research would deepen my understanding of how innovation shapes economic outcomes across different contexts. I am particularly excited about learning from the boot camp's distinguished speakers. Additionally, the opportunity to engage with other young scholars during the boot camp and Summer Institute Innovation Policy meeting would help me refine my research direction and potentially develop new collaborations.

My interdisciplinary background in information science and economics positions me to contribute unique perspectives to discussions during the boot camp. I look forward to both learning from and engaging with the innovation research community through this program.

Thank you for considering my application.

Sincerely,
Jingyi Qiu
School of Information
University of Michigan
Email: jaqiu@umich.edu

Reference:

- Prof. Alain Cohn `adcohn@umich.edu`

Jingyi Qiu

School Address
School of Information
University of Michigan
Ann Arbor, MI 48109

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Research Interest

My research interests lie at the intersection of behavioral economics, human-AI collaboration, and science of science. I focus on how information presentation through AI and information technologies shapes economic outcomes, such as job market success, crowdfunding effectiveness, and news consumption.

Education

University of Michigan
Ph.D. in Information Science — 2022 - present
Advisors: Yan Chen and Alain Cohn
Candidacy achieved — May, 2024

Duke Kunshan University
B.Econ. in Economics (Inaugural Undergrad Class) — 2018-2022

Duke University
B.A. in Interdisciplinary Studies - Institutions and Governance; Economics — 2018-2022

Working Papers

Qiu, Jingyi, Yan Chen, Alain Cohn, and Alvin E. Roth. "Social Media and Job Market Success: A Field Experiment on Twitter." Available at SSRN 4778120 (2024).

Ye, Teng, Jingnan Zheng, Junhui Jin, Jingyi Qiu, Wei Ai, and Qiaozhu Mei. "Using Artificial Intelligence to Unlock Crowdfunding Success for Small Businesses." Available at SSRN 4806426 (2024).

Publications

Qiu, Jingyi, and Russell Golman. "Curiosity in news consumption." *Applied Cognitive Psychology* 38, no. 2 (2024): e4195.

Seminars and Conference Presentations

2024 SITE (Stanford), Caltech, Econometric Society Interdisciplinary Frontiers (ESIF) conference on Economics and AI+ML (Cornell), BEAT (Tsinghua), Spring School in Behavioral Economics Poster (UC San Diego), American Data Science Alliance (ADSA) Annual Meeting (UMichigan)

2023 Advances with Field Experiments (UChicago), Caltech Behavioral/Experimental Workshop, ESA North America (UNC)

2022 SABE (Lake Tahoe), ESA North America (Santa Barbara), SSCW (virtual), CES (virtual), BFGA (virtual), EC'22 Poster (virtual)

Honors, Awards, Fellowship, and Grants

Pre-candidacy Paper, Pass with Distinction (Top 10%)	2024
Rackham Graduate Student Research Grant, University of Michigan ($3,000)	2024
Robert B. Zajonc Scholars Fund, University of Michigan ($5,000)	2022
Rackham Graduate Student Research Grant, University of Michigan ($1,500)	2022
DEI Funding, University of Michigan School of Information	2022

Media Coverage

- Michigan News: Economist retweets boost visibility, outcomes for doctoral job seekers
- New Things Under the Sun: Twitter and the Spread of Academic Knowledge
- Ann Arbor Times: Study finds economist retweets boost visibility for doctoral job seekers

Professional Development

- Participant, NBER Digital Economics and AI Tutorial, Spring 2025
- Participant, UCSD Spring School in Behavioral Economics, Spring 2024
- Participant, Caltech Behavioral/Experimental Workshop, Summer 2023

Teaching

Teaching Assistant at the University of Michigan

- SI 602: Mathematical Foundations of Data Science — Winter 2025

Technical Skills

- Research Methods: Survey design, field experiments, online lab experiments, causal inference, statistics, recruitment using Prolific
- Programming: Python (PyTorch), R, SQL, HTML
- Tools: Qualtrics, oTree (interactive experiment platform for behavioral research), Jupyter Notebooks, LaTeX

Service

Coordinator of Michigan Behavioral and Experimental Economics lab meetings	2024 - present
Coordinator of Michigan Behavioral and Experimental Economics (SBEE) Seminar	2023 - 2024
Co-organizer - Workshop of Navigating the Economics Job Market	November, 2023

PhD Coursework

- Econometric Analysis
- Microeconomic Theory
- Causal Inference
- Behavioral and Experimental Research in Operations
- Math for Economists
- Digital Public Goods

Research Statement

Jingyi Qiu

My research investigates how competition affects content presentation and resource allocation across markets. I study this in three settings: academic research, where competitive pressure may drive strategic presentation of scientific work; crowdfunding, where campaigns compete for limited donor attention; and news media, where content providers strategically frame information to attract readers.

My early work investigated how content providers compete for attention in various markets. In a study of news media consumption (Qiu and Golman, 2024), we used natural language processing techniques to analyze over 100,000 WeChat news articles and identified specific features in headlines that drive readership. Through experimental validation, we demonstrated that these linguistic features causally influence how readers choose which articles to consume. Moving beyond news consumption to financial outcomes, we examined how content presentation affects success in crowdfunding markets (Ye et al., 2024). Analyzing over 11,000 small business campaigns on GoFundMe, we found that AI-driven modification in campaign descriptions can significantly increase funding success. Most recently, in a field experiment during the 2022-23 economics job market (Qiu et al., 2024), we tested whether social media promotion by prominent economists influences candidates' success. Job market papers promoted by these economists received 442% more views and job market candidates received one additional flyout beyond the control group average of 5.4. Together, these studies illustrate how strategic content presentation and visibility influence economic outcomes across competitive environments. They provide the foundation for my proposed dissertation research on how researchers present their work in academic settings.

Building on these insights about strategic presentation in competitive markets, my current research examines how competition shapes research presentation and its implications for innovation policy and R&D productivity. As federal R&D spending continues to grow, understanding how competitive pressures affect research presentation and subsequent resource allocation becomes increasingly crucial for policy effectiveness. Recent evidence suggests that promotional language in scientific writing has become more prevalent. Specifically, promotional language in NIH grants doubled between 1985 and 2020 (Millar, Batalo and Budgell, 2022). Evidence suggests this strategy may be effective, as promotional language correlates strongly with funding success and citation impact (Peng et al., 2024).

My job market paper intends to investigate how different competitive structures in academia affect how researchers present their work and the resulting economic costs. I focus on machine learning research, where standardized benchmarks allow us to separate technical innovations from strategic presentation. The empirical analysis has three components. First, I examine how competitive pressure affects researchers' language choices in presenting similar technical achievements. Second, I exploit variations in competitive structures across venues to identify their effects on research presentation.

My future research agenda extends this work in several directions. I plan to study how competition affects collaboration patterns in science, particularly whether intense competition leads researchers to form strategic alliances that may not optimize knowledge production. I'm also interested in examining how different funding mechanisms might mitigate the effects of strategic presentation on resource allocation. Additionally, I aim to investigate whether increasing competition affects the diversity of research approaches, potentially leading to premature convergence on popular but suboptimal research directions.

The NBER Innovation Research Boot Camp's comprehensive coverage of innovation research would deepen my understanding of how innovation shapes economic outcomes across different contexts. I am particularly excited about learning from the boot camp's distinguished speakers. Additionally, the opportunity to engage with other young scholars during the boot camp and Summer Institute Innovation Policy meeting would help me refine my research direction and potentially develop new collaborations.

References

Millar, Neil, Bojan Batalo, and Brian Budgell. 2022. "Trends in the use of promotional language (hype) in abstracts of successful national institutes of health grant applications, 1985-2020." *JAMA network open*, 5(8): e2228676–e2228676.

Peng, Hao, Huilian Sophie Qiu, Henrik Barslund Fosse, and Brian Uzzi. 2024. "Promotional language and the adoption of innovative ideas in science." *Proceedings of the National Academy of Sciences*, 121(25): e2320066121.

Qiu, Jingyi, and Russell Golman. 2024. "Curiosity in news consumption." *Applied Cognitive Psychology*, 38(2): e4195.

Qiu, Jingyi, Yan Chen, Alain Cohn, and Alvin E Roth. 2024. "Social Media and Job Market Success: A Field Experiment on Twitter." *Available at SSRN 4778120*.

Ye, Teng, Jingnan Zheng, Junhui Jin, Jingyi Qiu, Wei Ai, and Qiaozhu Mei. 2024. "Using Artificial Intelligence to Unlock Crowdfunding Success for Small Businesses." *Available at SSRN 4806426*.

SCHOOL OF INFORMATION
UNIVERSITY OF MICHIGAN
Inspiration. Innovation. Impact.

Ann Arbor, February 5, 2025

Re: Recommendation letter for Jingyi Qiu - NBER Innovation Research Boot Camp

Dear Committee Members,

I am writing to recommend Jingyi Qiu, a PhD student at the University of Michigan's School of Information, for the 2025 NBER Innovation Research Boot Camp. As Jingyi's co-advisor, I have had the pleasure of working closely with her and have been consistently impressed by her motivation and dedication for research.

For her job market paper, Jingyi plans to examine how competitive pressure in academic publishing influences researchers' presentation strategies and their subsequent impact on resource allocation efficiency in science. The study leverages machine learning research as an empirical setting, exploiting standardized performance benchmarks to disentangle technical contributions from strategic framing. Specifically, the study will investigate (1) how competitive pressures drive promotional language use, (2) how different competitive structures (e.g., fixed vs. flexible acceptance rates) affect research framing, and (3) the economic costs of competition-driven presentation strategies in terms of funding misallocation and R&D productivity.

This research builds on Jingyi's existing research agenda, which examines how the presentation of information affects economic outcomes. Her prior work includes a field experiment conducted during the 2022-23 economics job market that examined the causal impact of social media promotion on labor market outcomes.

Jingyi has demonstrated remarkable skill in causal identification strategies and brings creative insight to her research. Her unique background, bridging information science and economics, allows her to tackle questions about competition and innovation from fresh angles while maintaining methodological rigor. I believe the boot camp would offer her unique opportunity to expand her skills and meet young researchers who are interested in similar questions. I therefore strongly endorse her application.

Sincerely,



Alain Cohn
Associate Professor, University of Michigan School of Information