Jinkyong (Jin) Choi
Columbia Business School
New York, NY, USA
jc5901@columbia.edu

February 5, 2025

Dear Professors Bryan, Ganguli, Myers, and Members of the Selection Committee,

I am writing to apply for the 2025 NBER Innovation Research Boot Camp. I am a third-year Ph.D. student in the Strategy Group at Columbia Business School. My advisor and letter writer for this application is Professor Jorge Guzman (Columbia Business School).

My current research focuses on how social networks and geographic infrastructure shape the diffusion of knowledge and spur innovation. Specifically, I study the interplay between regional factors and the networks that facilitate (or impede) the transfer of ideas, resources, and capabilities. By integrating perspectives from the economics of innovation, geography, and network science, I seek to understand how social network shape regional innovation ecosystems. Insights from the economics of innovation are therefore indispensable for my dissertation, which examine the fine-grained mechanisms behind knowledge diffusion.

The NBER Innovation Research Boot Camp is a unique opportunity for me to deepen my understanding in the economics of innovation. The lecture topics—ranging from knowledge spillovers to empirical strategies in innovation research—align closely with my research interests. I am especially excited about learning from and discussing with scholars whose research I have found inspiring (e.g., Prof. Myers' work on public R&D and knowledge diffusion, Prof. Bryan's work on R&D competition and the direction of innovation, Prof. Ganguli's work on formation of scientific collaborations). This environment would help me gain new perspectives, refine my methodological approaches, and form valuable connections with fellow researchers tackling similar questions.

As a past participant in the NBER Entrepreneurship Bootcamp, I gained foundational insights on entrepreneurship. However, my research trajectory has evolved to focus more closely on innovation—particularly the mechanisms of knowledge diffusion within networks and regions. Attending the Innovation Research Boot Camp would build on that prior training by placing a sharper lens on innovation processes, enabling me to develop a more rigorous theoretical and empirical grounding in the economics of innovation, which now is the focus of my work.

Thank you for considering my application. I look forward to the possibility of contributing to and learning from this valuable community of scholars.

Sincerely,

Jinkyong (Jin) Choi
Ph.D. Candidate, Strategy Group
Columbia Business School

Jinkyong (Jin) Choi

CONTACT INFORMATION
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RESEARCH AREA
Innovation and entrepreneurship, social network, economics of geography

EDUCATION

Columbia Business School 2022 -
Ph.D of Business Management, Strategy Group

University of Chicago 2022
Master of Public Policy, Data and Analytics specialization

Seoul National University 2018
Bachelor of Arts

RESEARCH

Working Paper
(Title: Third Places and Neighborhood Entrepreneurship: Evidence from Starbucks Cafés)
** First Author, with Jorge Guzman and Mario Small, ready for submission*

- *featured in the Economist (Jul 4, 2024), the NBER Research Highlight (Jul 22, 2024), the NBER Bulletin on Entrepreneurship (Oct 21, 2024), NPR Planet Money the Indicator (Nov 20, 2024), and the Paychex Thrive Podcast (Sep 17, 2024)*

We examine whether the introduction of Starbucks cafés into neighborhoods increases entrepreneurship by creating a "third place" that mobilizes local community relationships and social capital. Using a staggered difference-in-differences approach, we find that when a Starbucks opens in a census tract with no prior cafés, the number of startups increases by 8 percent (2 firms) on average, in the following years. Introducing other cafés had a smaller effect, and a second coffee shop had none. A partnership between Starbucks and Magic Johnson which focused on underprivileged neighborhoods produced larger effects.

Working Paper
(Title: Data Centers and Regional Innovation Ecosystem)
with Angela Ryu

We propose the datacenters as potential catalysts for local innovation ecosystems, offering infrastructure critical for AI and attracting private investment and skilled human capital.This study explores the potential of datacenters to reshape local innovation ecosystems by examining their effects on patenting activity, STEM workforce development, and industry dynamics. Employing a difference-in-difference approach, we compare regions that secured datacenter investments to those that narrowly missed out. Our findings indicate that datacenters significantly boost AI-related innovation and human capital accumulation, particularly in technology-driven sectors, though their impact on non-tech industries remains limited.

PROFESSIONAL EXPERIENCE

Deputy Director 2018 – 2022
Innovation Planning Division, Korea Communications Commission (KCC)

- Led AI and Big Data policy research group, partnering with Google, IBM, Naver, Kakao, among others
- Implemented annual national panel survey program probing public views on AI and big data
- Managed KCC's R&D fund with a total value of over $3 million per year

Deputy Director 2017 - 2018
Arrivals and Departures Planning Division, 2018 Olympic Games Committee

Research Intern 2013
Accenture

Honors and Awards

Lang Innovation and Entrepreneurship Research Fellowship 2024

Teaching with AI Fellowship 2024

Center for Political Economy Research Grant 2024

Paul and Sandra Montrone Doctoral Fellowship 2022

Columbia Business School Doctoral Fellowship 2022-

University of Chicago Merit Scholarship 2020

SNU Development Fund Scholarship 2019

Korea Communications Commission Best Policy Innovation Award 2018

Republic of Korea Grade 5 Public Official 2015

Ranked 4 out of 15,000 competitors for the Grade 5 Public Official Open Competitive Examination
* Passing this exam is equivalent to 25 years of seniority working from the bottom up

Invited Consortia

NBER Digital Economics and AI Tutorial Feb. 2025

Summer Institute in Computational Social Science Aug. 2024

NBER Entrepreneurship Research Boot Camp Jul. 2024

Strategy Science Doctoral Consortium Jun. 2024

The East Coast Doctoral Conference Apr. 2024

Southern Economic Association ASHE Presidential Session on Entrepreneurship Oct. 2023

Smith Entrepreneurship Research Conference Doctoral Consortium Apr. 2023

Leadership and Service

Co-organizer, East Coast Doctoral Conference 2025

Divisional Social Chair, Columbia Business School 2024-2025

Completed Coursework

Introduction to Econometrics	Columbia Business School
Financial Economics: Panel Data	Columbia Business School
Economics of Labor	Columbia Business School
Behavioral Economics	Columbia Business School
Research Methods	Columbia Business School
Industrial Organization	University of Chicago
Advanced Microeconomics	University of Chicago
Advanced Statistics	University of Chicago
Strategy	Columbia Business School
Advanced Strategy	Columbia Business School
Organization Theory	Columbia Business School
Natural Language Processing	Columbia Business School
Machine Learning	Columbia Business School
Organizational Behavior	Columbia Business School

Skills and Techniques

Technical: Python, R, Stata, LaTeX

Last update: Feb 05, 2025

Research Overview and Motivation

Jinkyong Choi
Columbia Business School
Advisor: Jorge Guzman

My research explores how place-based factors shape the social networks that drive innovation. In particular, I investigate how location-specific resources—ranging from community gathering spaces to advanced digital infrastructure—foster social networks that facilitate knowledge diffusion, enable collaboration, and spark novel ideas. Grounded in the economics of agglomeration and innovation, my work integrates insights from network theory to examine how these social connections emerge, evolve, and contribute to the formation of innovation clusters.

One of my research projects with Jorge Guzman and Mario Small examines how local "third places" can serve as catalysts for entrepreneurial activity. Employing a staggered difference-in-differences design, we show that the introduction of a new Starbucks café is associated with approximately an 8% increase in neighborhood startup rates. Featured in *The Economist* and highlighted by NBER, this work illustrates how local gathering places support entrepreneurship by translating everyday social interactions into economic opportunities. In parallel, another working paper of mine investigates how data centers can anchor AI-driven innovation ecosystems in regions historically distant from major technological hubs. Our preliminary analysis suggests that these facilities attract specialized STEM talent, reshaping local social and economic structures in ways that echo the role of community gathering spaces.

Building on these insights, my dissertation will examine which forms of social ties are amplified by geographic proximity and how they accelerate innovation in detail. First, I plan to identify which network among various networks—alumni connections, shared work histories, and professional associations—are amplified through local interactions. By utilizing a range of detailed network data for this analysis, I hope to extend this line of inquiry beyond traditional co-invention or co-authorship metrics. Then, I will distinguish among three critical processes through which social ties may enhance innovation: (1) Fostering collaborations (e.g., co-authorships or joint ventures), (2) Facilitating knowledge spillovers that transmit expertise and best practices, (3) Inspiring creative brainstorming that leads to breakthrough ideas. By mapping these pathways, I aim to identify the primary route through which local social ties operate. Ultimately, I hope to contribute to advancing our understanding of the micro-level mechanisms that drive innovation.

While I am excited to pursue this line of inquiry, I recognize that further refinement of the theoretical framework and causal identification strategy is needed. I am therefore eager to receive feedback from leading scholars in the field by attending the NBER Innovation Research Boot Camp. It would be an invaluable opportunity to refine my theoretical and methodological approach by engaging with a vibrant community of researchers of innovation. I also believe I can contribute to the community by offering my unique perspective. I look forward to both contributing to and learning from this community.

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Jorge Guzman
Gantcher Associate Professor of Business,
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Dear Colleagues,

This letter is to recommend Jin Choi, a PhD student at Columbia's Management Division, to the NBER Innovation Boot Camp. I am Jin's main advisor and she is my co-author in a paper with Mario Small on how Starbucks promotes neighborhood social networks and entrepreneurship.

While our paper is on neighborhood startups, Jin's work has moved more to innovation. She wants to build her job market paper (and dissertation) around the question of how social networks are bounded by space, which, in turn, mediates for innovation spillovers. This question has always been relevant in innovation economics, and interest in it is increasing. Jin is particularly well set up to study networks and innovation because she has the training to bridge the deep understanding of social networks we teach at Columbia (such as through Mario Small or Dan Wang) with innovation economics. However, we do not have a good class on innovation economics at Columbia, and Jin seems to be less up to date than I think she should be in terms of the latest in the space: measuring innovation outcomes, the merits of different dependent variables, the latest papers, and the process of regional spillovers. What she knows about innovation and space has been slowly learned through papers I've pointed out to her. Still, she'd immensely benefit from a formal set of lectures, a complete syllabus containing the relevant literature, and the experience of a community focused on this topic.

For this reason, I think the boot camp would be highly beneficial for her. I expect her to eventually become a productive innovation scholar with a position in a strategy department. Given her productivity and talent, I also expect investing in her participation will be a high return for the field.

Thank you for considering her application.

Jorge Guzman

Columbia University
New York City