Name: Karan Makkar

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Phone #: +16103926187

Program: UC Berkeley Econ PhD

Year of Entry: 2025

Expected Year of Completion: 2030

Faculty Member Supplying Letter: Martin Beraja

Karan Makkar

EDUCATION

Ph.D., Economics: UC Berkeley 2025-
BS in Math and BA in Economics (High Honors): Haverford College May 2022
Summa Cum Laude
GPA: 3.96

RESEARCH

Peer Reviewed Publications

- Makkar, K. (2023). Political Defectors and Local Economic Growth: Evidence from India. *European Journal of Political Economy*.

Working Papers

- Groff,Z., Makkar, K. Positive Social Discount Rates: An Experiment on Cross-Cohort Time Preferences.

HONORS AND AWARDS

- Holland Hunter Thesis Prize (Haverford College, BA): Awarded to best senior thesis in the year
- Summa Cum Laude (BA)
- Phi Beta Kappa Society
- Honorable Mention: NSF GRFP

EXPERIENCE

Pre-Doctoral Fellow for Ben Olken and Rema Hanna, Harvard Kennedy School July 2023- Present

- Cleaned and analyzed matched administrative-survey data for papers on cash transfer targeting, property tax collection and job training in Indonesia and India.
- Ran real-time validation of survey data collection, conducted power analyses, created replication packages.
- Corrected and enhanced a lee-bounds function to correct for differential attrition from surveys.

Research Associate for Raymond Kluender, Harvard Business School June 2022-June 2023

- Cleaned and analyzed transaction-level bank account data for papers on inflation expectations and optimal UI.
- Wrote a Pyspark algorithm to improve the classification of bank-transaction data.
- Conducted empirical strategy design, collected original online survey data, conducted literature reviews.

Intern, IDFC Institute (now Artha Global) July-September 2021

- Wrote Python code to help compile IDFC's Mumbai Covid Database
- Developed heavy industry and agriculture decarbonisation pathways for a report on India's green transition.

Econometrics and Macroeconomics TA, Haverford College Economics Department Sept 2020-May 2021

SELECTED COURSEWORK

Haverford College:

- **Math:** Real Analysis 1, Real Analysis 2 (Measure Theory), Probability Theory, Topics in Financial Mathematics, Abstract Algebra, Senior Conference (Topics in Knot Theory), Linear Algebra.

Graduate Level Econonmics Courses

- Econ Core Sequence Semester 1 (Micro, Macro, Metrics)
- Industrial Organization
- Labor Economics

Other

- The Economics of Transformative AI, Stanford University (2025)
- Economic Theory & Global Prioritization, Oxford University (2023)

SKILLS

Software

- High proficiency in Stata, R and Latex
- Intermediate Proficiency in Python, PySpark, Javascript, and any language in the LLMs' training data.

Languages

- Native level written and spoken ability in English and Hindi

Research Interests

My research interests center on how entrepreneurs' choices about where to found firms and which technologies to develop shape the global distribution of innovation and its beneficiaries. Specifically, I aim to study how these decisions affect the spatial concentration of innovative activity across developed and developing countries, the suitability of new technologies for different income levels and development contexts, and how market structure and inequality influence which innovations emerge and who gains from technological progress.

I'm currently working on a project examining how high-skilled migration affects origin-country innovation. Using shift-share instruments that combine industry-region variation in migration exposure with H-1B cap changes, I'm estimating effects on VC-backed startup formation and patenting in India and China. The project aims to test for and quantify potential tradeoffs between frontier innovation speed through talent agglomeration and ensuring technological relevance for developing economies. I'm also interested in several extensions to this work that are essential for comprehensive welfare analysis of the high skill migration question: whether return migrants are disproportionately likely to found firms (and if so, in which industries); and whether diaspora networks provide capital to origin-country founders.

Beyond this migration project, I'm developing research questions in three related areas. First, how does non-homotheticity in consumption baskets interact with high inequality to shape innovation direction and its welfare effects? In India, where the top ventile's consumption basket differs radically from the bottom half's, how strongly do entrepreneurs target high-income consumers, and what are the welfare consequences of this differential technological progress? Second, following Moscona et al., can policy redirect entrepreneurship toward "appropriate technology"? India's UPI payment infrastructure offers a natural setting for testing whether public digital infrastructure shifts founding patterns toward innovations benefiting lower-income consumers. Third, how will AI change the composition of entrepreneurs and the problems their companies target? If AI tools rapidly reduce the cost of specific inputs (e.g., software) this could differentially reduce the barriers to entry for founders from specific (e.g., non-technical) backgrounds, or working on particular technologies.

Why Bootcamp?

General

- I get to spend time with a lot of talented economists with similar interests to mine. Ideal opportunity to find potential collaborators for turning these questions into concrete projects
- Intense introduction to the frontier methods and research on this topic

Comparative Advantage/Costly Signals:

- Since I'm a first year PhD student, my research agenda is still malleable. The bootcamp could have a larger treatment effect for me than it would for more experienced researchers in this area (infra-marginal) or those mostly committed to other agendas (low P(switch))
- I chose Berkeley over outside options for proximity to Bay Area AI and startup ecosystem
- I'm (currently/over the summer) working with Professors with adjacent research interests
    - Martin Beraja on AI x organizational learning speed, Carolyn Stein on AI x science

BerkeleyHaas

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UC Berkeley Haas School of Business

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Berkeley CA, 94720

Dear Selection Committee,

I am pleased to write in support of Karan Makkar's application to the NBER Entrepreneurship Bootcamp. Karan is a first-year PhD student in Economics at UC Berkeley and has worked as my research assistant over the past four months on a project studying the value of organizational learning technologies.

In this role, Karan has been responsible for a key portion of the empirical work. My impression of him comes primarily from this collaboration. He has been consistently diligent, careful, and highly reliable in execution. The work involves assembling and cleaning datasets, implementing empirical specifications, and ensuring that results are reproducible. Karan approaches these tasks with strong attention to detail and intellectual seriousness, and he communicates clearly when issues arise.

In our research discussions, **I have found him to be articulate and thoughtful; he expresses ideas clearly and approaches problems in a structured way.** He is still in that early stage of finding research ideas, so the bootcamp would be particularly valuable for him. This is reflected in Karan's research proposal and bootcamp application materials. His proposed work examines how high-skilled migration affects innovation and entrepreneurship in origin countries, combining questions from development and innovation.

Although I have known Karan for a relatively short period of time, my experience working with him has been uniformly positive. Based on this experience, I am confident that he would benefit from the program and engage seriously with the material and other participants. **I therefore give Karan my most enthusiastic recommendation for the Entrepreneurship Bootcamp.**

Sincerely,

Martin Beraja

