Cover Letter

To the Innovation Research Boot Camp Selection Committee,

I am writing to apply to the Fifth NBER Innovation Research Boot Camp to be held in July 2026. I am a postdoctoral fellow in economics at the University of Chicago Booth School of Business and an incoming Assistant Professor at Carnegie Mellon University. My research focuses on the economics of innovation, with particular emphasis on how AI and new technologies transform organizational processes, labor markets, and productivity through changes in information production and decision-making inside firms.

My research agenda studies innovation not as a black-box productivity shock, but as *process innovation*: changes in how firms collect information, make decisions, and allocate human effort within organizational workflows. In my work, I embed AI autonomous systems directly into live organizational workflows, especially hiring, screening, and evaluation, to study how technological change alters firm behavior, worker outcomes, and market equilibrium.

A central paper on this agenda is my job-market paper, "*Voice AI in Firms: A Natural Field Experiment on Automated Job Interviews"* (with Luca Henkel). Using a large-scale natural field experiment involving over 70,000 job applicants, we show that automating information collection with AI voice agents increases hiring efficiency and worker retention without reducing worker productivity. The results point to a specific mechanism, *controlled variance*, through which process innovation improves organizational performance.

Beyond this project, my ongoing work connects innovation to three themes central to the boot camp: (i) firm-level productivity and organizational design, (ii) labor market inequality and selection, and (iii) innovation policy and welfare. In particular, I study the endogenous adoption of AI within firms, worker sorting and strategic responses to new screening technologies, and the equilibrium consequences of the diffusion of AI-based decision systems.

The Innovation Research Boot Camp would be uniquely valuable at this stage of my career. As I transition from postdoctoral training into a tenure-track position, I am eager to further integrate my organizational and field-experimental evidence with perspectives from growth theory, the science of innovation, and innovation policy, especially regarding measurement, externalities, and general equilibrium effects. The opportunity to engage with faculty such as Pierre Azoulay, Ben Jones, Kyle Myers, and Heidi Williams, and to participate in the NBER Summer Institute Innovation Policy meetings, would meaningfully sharpen both the conceptual framing and policy relevance of my research and play a formative role as I establish my research identity within the NBER innovation community.

Thank you very much for your consideration.

Brian Jabarian

Research Statement

A central but underexplored driver of economic growth is **process innovation**: improvements in how firms generate, standardize, and act on information. While the economics of innovation have traditionally emphasized new products, R&D, and production technologies, many of the largest productivity gains arise from reorganizing high-volume decision processes, such as screening, evaluation, and routing, where human judgment is noisy, costly, and difficult to scale.

My research studies how new technologies, particularly artificial intelligence, transform these organizational information systems and how this transformation affects productivity, inequality, and welfare. Rather than treating AI as a task-automation technology or an exogenous productivity shock, I conceptualize it as an **information-collection and decision infrastructure** that alters signal precision, incentives, and equilibrium outcomes once adopted at scale.

A flagship project, *Voice AI in Firms* (with Luca Henkel), provides causal evidence on process innovation in hiring. In a large natural field experiment involving over 70,000 job applicants, we randomize whether interviews are conducted by human recruiters or an AI voice agent, holding evaluation and hiring decisions fixed as human. AI-led interviews increase offer rates and improve downstream retention without reducing worker productivity. Transcript analysis reveals a key mechanism, **controlled variance**, whereby AI executes a structured interview protocol more consistently while remaining responsive within interviews, producing more comparable and decision-relevant information. This identifies a distinct innovation channel: productivity gains from reducing variance in information production, rather than from speed, scale, or pure labor substitution.

A second project, *Choice as Signal* (with Pëllumb Reshidi), treats AI adoption as a **design problem with welfare consequences**. When applicants choose between human and AI screening, the choice itself becomes informative. Once firms condition on this signal, welfare rankings can reverse: offering choice benefits to firms and high-ability applicants but leaving lower-ability applicants worse off than under assignment. Using the same experimental environment, we structurally estimate how screening design affects match quality and welfare, and we evaluate alternative mechanisms, including hybrid human–AI systems, that can dominate both pure human and pure AI screening.

In a new work-in-progress, I study how widespread adoption of shared AI screening technologies reshapes competition for workers in equilibrium, generating congestion and intensified rivalry in the upper tail of the skill distribution, even when firms do not coordinate and use heterogeneous hiring criteria.

My broader agenda uses large-scale field experiments and theory to address four innovation questions: (1) When does process automation raise productivity by improving information quality rather than reducing costs? (2) How should firms optimally allocate tasks between humans and AI when signal precision and strategic behavior are endogenous? (3) How are gains from process innovation distributed across worker types as adoption diffuses? (4) Which disclosure, audit, or governance regimes preserve trust and mitigate externalities as AI becomes embedded in institutional decision-making?

Brian Jabarian January 2026

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Academic Positions

Assistant Professor, Heinz College, Carnegie Mellon University	2026 –
Assistant Professor (by courtesy), School of Computer Science, Carnegie Mellon University	2026 –
Howard and Nancy Marks Fellow (Postdoc), University of Chicago, Booth Business School	2023 – 2026

Academic Affiliations

J-PAL, Partnership for AI Evidence, Invited Researcher	2025 –
Innovation Growth Lab (IGL), Research Network Member	2025 –
Joint Initiative Latin American Experimental Economics (JILAEE), Research Affiliate	2024 –
Booth Center for Applied Artificial Intelligence, Affiliated Researcher	2023 –
Center for Economic Studies + Ifo Institute (CESifo), Research Network Affiliate	2023 –

Research Interests

Behavioral and Experimental Economics;
Digital Economics, Information Systems and Artificial Intelligence;
Economics of Science and Innovation

Education

Ph.D., Economics, Paris School of Economics 2023
Dissertation link: The Economics of Moral Uncertainty
Visiting Ph.D. Student, Princeton University, 2018–2020

Ph.D., Philosophy, Panthéon-Sorbonne University 2023
Dissertation link: A Framework for Critical Thinking In An Uncertain World

M.Sc., Philosophy of Science, London School of Economics 2017

M.A. Economics & B.A. in Philosophy, Aix-Marseille University 2013-2015

Publications

** denotes articles in which I am the lead author*

The Next Generation of Experimental Research with LLMs*
with Gary Charness, and John. A. List,
Nature Human Behaviour, (9)(5);
(peer-reviewed and lead article); previously circulated under the title "Generation Next: Experimentation with AI", *No. w31679. NBER, 2023.*

Working Papers

1. Choice as Signal: Designing AI Adoption in Labor Market Screening with Pëllumb Reshidi
2. Artificial Writing and Automated Detection*
   with Alex Imas
3. Voice AI in Firms: A Natural Field Experiment on Automated Job Interviews*
   with Luca Henkel

4. AI Behavioral Science
   with Matthew O. Jackson, Qiaozhu Mei, Stephanie W. Wang, Yutong Xie, Walter Yuan, Seth Benzell, Erik Brynjolfsson, Colin F. Camerer, James Evans, Jon Kleinberg, Juanjuan Meng, Sendhil Mullainathan, Asu Ozdaglar, Thomas Pfeiffer, Moshe Tennenholtz, Robb Willer, Diyi Yang, and Teng Ye
5. Distributional Approach to Risk Preferences
   with Nir Chemaya, Charles Johnson, Enoch Yeung, Gary Charness
6. Two-Ball Ellsberg Paradox*
   with Simon Lazarus
   CESifo Distinguished Affiliate Award 2023, finalist
7. Critical Thinking and Storytelling*
   with Elia Sartori
8. The Virtue of Lab Experiments*
   with Gary Charness, James Cox, Catherine Eckel, Charles Holt
   Revise & Resubmit at *Journal of Economic Behavior and Organization*

Selected Work-in-Progress

1. Automated Hiring Decision-Making: Theory and Natural Field Experiment
   with Pellumb Reshidi, Luca Henkel and Ruru Hoong (design phase)
2. AI Personalization in Labor Markets
   with Luca Henkel (design phase)
3. Critical Thinking and Economic Impacts: A Natural Field Experiment in Saudi Arabia on Educational and Labor Performance
   with Michael Cuna, Faith Fatchen, Faisal Kattan, Min Sok Lee, and John List, (in the field)

Research Grants

Total ≈ $1,000,000:

1. Artificial Process Outsourcing, Principal Investigator (≈ $115,000): Thaler-Tversky Independent Research Grant, 2025 ($2,500); Google Cloud, Research Grant Program, 2025 ($11,000); Booth CAAI Research Seed Grant, 2025 ($15,000); BFI Research Program in Behavioral Economics Research Seed Grant 2024 ($10,000); Schmidt Science, AI at Work Program ($72,222)
2. Ethical Views and Social Welfare: Theory and Evidence, Co-Principal Investigator with P. Piacquadio; Swiss National Science Foundation, 2024-2027, 545,797 CHF (≈ $650,000)
3. Opening Economic Sciences, Principal Investigator: Effective Ventures US, 2022, ($200,000)
4. The Economy of Critical Thinking, Principal Investigator: Forethought Foundation, 2019, ($40,000)

Fellowships & Awards

Russell Sage Foundation Summer Institute in Behavioral Economics	2024
Howard and Nancy Marks Fellowship, Chicago Booth	2023-2026
Ph.D. Excellence Fellowship, Fondation de l'École Polytechnique X	2021
Global Priority Fellowship, Forethought Foundation	2018-2021
Excellence Mobility Fellowship, Paris School of Economics	2018
College Excellence Mobility Fellowship, Panthéon-Sorbonne University	2018
Global Ph.D. Excellence Fellowship, Gulbenkian Foundation	2018

Invited Speaker

2026 *Lectures, Workshops and Conferences*
UCLA Anderson (Guest Lecturer in Jana Gallus' MBA class on Field Experiments in Entrepreneurship and Strategy); Wharton; University of Pittsburgh (AI, Health & Well-Being Conference);

2025 *Departmental Seminars*
The University of IOWA (Department of Economics & Tippie College of Business, Tow Lecture in Economics); University of Michigan (Department of Psychology, Decision-Making and AI Seminar); Texas A&M (Department of Economics, Behavioral Economics Seminar); University of Illinois Urbana-Champaign, Department of Economics (Applied Microeconomics Seminar); University of Chicago, Development Innovation Lab (Lunch Research Seminar); Carnegie Mellon University, Heinz College; EM Lyon Business School (AI in Management Seminar); NYU Stern (TOPS Seminar); UIUC Gies Business School (Marketing Seminar); HEC Paris (AI & Economics Seminar);

Lectures, Workshops and Conferences
University of Chicago Booth Business School (guest lecture in Alex Imas' class in Behavioral Economics); Stanford University (Center for Advanced Study in the Behavioral Sciences, AI Behavioral Science Conference); University of Arizona (Invited Conference on Experimental Economics); ETH Zurich and University of Zurich (Zurich Workshop in AI+Economics); Harvard Business School & INSEAD (Conference on Field Experiments in Strategy); Innovation Growth Lab (Experimentation Webinar Series); USC Marshall Initiative on Digital Competition and the USC Dornsife College Department of Economics (Conference on AI, Business, and Economics); HEC Paris (AI & Entrepreneurship Workshop); Luohan Academy (Webinar Series); Innovation Growth Lab (Experimentation Webinar Series);

Industry and Policy Talks
Google (Google Economics Seminar); Microsoft Research (AI & Business Value Internal Meeting);

2024 *Departmental Seminars*
MIT (Department of Economics, Behavioral Economics Seminar), University of California, Davis (Department of Economics, Behavioral Economics Seminar), University of South California (Department of Economics, Behavioral Economics Seminar); Stanford University (Department of Economics, Behavioral Economics Seminar)

Lectures, Workshops and Conferences
Harvard Business School (Technology and Operations Management Unit, Seminar), Harvard Business School & INSEAD (Strategy, Entrepreneurship and Management Unit, Invited Conference on Field Experiments in Strategy), Harvard University (Harvard Business School & D^3 Institute, Invited Conference on AI in Business); University of Chicago Booth Business School (guest lecture in Alex Imas' class in Behavioral Economics); Stanford University (Human-AI Center and Graduate School of Business, Digital Economics Seminar); Caltech (Department of Social Science); University of California Santa Barbara (Department of Economics)

Industry and Policy Talks
Dropbox (AI External Speaker Seminar), Microsoft Research (Jamie Teevan's AI group), Google Research NYC (Economics, External Speaker Seminar), KeystoneAI (Strategy, External Speaker Seminar), JSTOR Foundation (External Speaker Seminar), the World Bank (DIME and DECDG), and University of Chicago Booth Business School (Stiegler Center Journalists in Residence Program).

2023 International Monetary Fund (Capacity Development, External Speaker Seminar); CESifo (Area Conference on Behavioral Economics); the University of Chicago Booth School of Business (Behavioral Science Brown Bag, Behavioral Economics Internal Seminar, George Wu's Lab, Emma Levine, and Chaudhry's Lab); the University of Chicago, Becker-Friedman Institute (John List's Lab) and St. Gallen University (Department of Economics)

Teaching

1. University of Chicago, Department of Economics: Instructor, The Chicago Summer School in Experimental Economics (invited by John List): Summer 2024, Summer 2025;
2. University of Chicago Booth Business: Guest Lecturer, Behavioral Economics Class (undergraduate level, invited by Alex Imas); Spring 2024 (x1); Spring 2025 (x1)

3. University of Paris 1 Panthéon-Sorbonne, Department of Economics: Teaching Assistant, Mathematics for Economics (TA, Undergraduate): Spring 2018; Introduction to Economics (TA, Undergraduate): Fall 2017
4. Science Po Paris, School of Public Affairs: Teaching Fellow, MOOC on Entrepreneurship, Innovation and Culture (Executive Education): Fall 2017; Economics of Culture (Graduate): Spring 2018; Introduction to Social Sciences (Undergraduate): Summer 2018

Service to Profession

1. Journals Referee: *Quarterly Journal of Economics*, *Journal of Political Economy*, *PNAS*, *Management Science*, *Journal of Political Economy: Micro*, *Journal of the European Economic Association*, *Economic Journal*, *Journal of Human Resources*, *Journal of Monetary Economics*, *International Economic Review*, *Games and Economic Behavior*, *Journal of Economic Behavior and Organization*, *Experimental Economics*, *PNAS Nexus*, *Journal of the Economic Science Association*, *Applied Economics Letters*
2. Invited for Grant Review National Science Foundation (SES - Economics); Czech Science Foundation; UK Research Innovation Funding Service (UKRI); Swiss National Science Foundation (SNSF)
3. Conferences, Workshops, Seminars, Masterclass
   - Innovation Growth Lab, Masterclass Series on Designing Field Experiments, with Rem Koning (HBS), Sharique Hasan (Duke), Hyunjin Kim (INSEAD), Silvia Castro (INSEAD), Manuela Collis (University of Toronto) , 2025 –
   - Chicago Booth, Brown Bag in Behavioral Science, co-organizer, with George Wu (Chicago Booth), 2023 – 2026
   - Chicago Booth, Special Invited Seminar for Maya Bar-Hillel (Hebrew University of Jerusalem), co-organizer, with Richard Thaler (Chicago Booth), May 2024
   - Princeton University, School of Public and International Affairs, Brown Bag in Economics and Ethics, co-organizer, with Marc Fleurbaey (Princeton University), 2018-2020
4. Student Mentoring
   - *UChicago, MAPSS Program*, MA Advisor 2024-2025
   - *UChicago, Summer Institute in Social Science Research methods*, Mentor, Summer 2025
   - *Effective Thesis*, Advisor, 2025
   - *Individual Mentoring*: *Yeeun Koh*; initial position: undergraduate, Department of Economics, Wooster College, 2023; first placement: Ph.D. in Economics at University of Michigan, started Fall 2024; *Daniel Carrey*; initial position: undergraduate, Department of Economics, LSE, 2023; first placement: research fellowship at Global Priority Institute, Oxford University, started Fall 2023; *Rishane Dassanayake*; initial position: undergraduate, Department of Economics, LSE, 2023; first placement: full-time, Longview Philanthropy, started spring 2025; *Andres James*; initial position: master student, Department of Data Science, UChicago, 2025; first placement: full-time PSG Global Solutions, started January 2026;