Cristian Alamos

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Fields of Research

Applied Microeconomics, Labor Economics, Economics of Innovation

Education

University of California, Berkeley 2024
B.A. in Computer Science and B.A. in Economics

Research Experience

Stanford Institute for Economic Policy Research (SIEPR) 2025 – Present
Predoctoral Research Fellow for Professor Lukas Althoff

- Coauthor on "*Networks and Innovation: The Internet's Impact on Science*"
- Coauthored "*SciNet: The Anatomy of Science*," a comprehensive database of scientific research tasks
- Contributed to all stages of research, from formulating research questions and developing identification strategies to drafting paper sections and responses to referees
- Built pipelines for record linkage, LLM-based text classification, and digitization of archival records
- Linked 10M+ papers and patents and optimized the performance of a latent variable estimator

UC Berkeley Haas School of Business 2022 – 2024
Research Assistant for Professor Sydnee Caldwell

- Developed empirical Bayes model of firm-level labor supply elasticities in Python and MATLAB
- Scraped 2.5M+ job board reviews in Python and created replication package for journal submission
- Built JavaScript Qualtrics module to customize survey questions using participant metadata
- Created fuzzy matching algorithm to merge data from administrative records and online job boards
- Hired as part-time RA after participating in the Undergraduate Research Apprenticeship Program

Working Papers

Networks and Innovation: The Internet's Impact on Science (with Lukas Althoff)
The internet began as an effort to connect researchers, first in the US and later globally. This paper studies how the internet transformed scientific discovery. We construct a global dataset on when universities and firms first connected to the internet, starting in 1969, and link it to over 10 million publications and patents with detailed information on authors, content, citations, and references. We find that the internet changed what scientists work on, without changing who they work with. After their university connects, scientists turn to increasingly applied questions. At the same time, firms increasingly rely on those new scientific discoveries in their patenting (but not older discoveries). Firms' own research becomes more theoretical and thus more similar to university research. Collaboration is largely unaffected. We develop a simple model of scientific information networks that highlights the strength of weak ties: by sharing open questions and solutions, lower communication costs can change the direction of science. Text from 300,000 posts in early online scientific forums sheds additional light on the open exchange of questions and solutions across researchers at universities and firms.

Who Gets to Propose Novel Scientific Ideas?
Novel ideas drive scientific progress, yet their value is particularly difficult to judge in advance. The scientific community may therefore rely on authors' reputations to evaluate novel ideas, undervaluing those proposed by less established researchers. This paper studies whether novel ideas are underrated by peer review relative to their impact, especially when proposed by junior scientists. I extract referees' assessments of novelty from 123,000 reports on all submissions to a top artificial intelligence conference, measuring impact through citations and code reuse. Novel papers receive *higher* overall referee ratings, holding impact constant. However, this "novelty boost" is entirely absent for papers by junior authors. Using referees' self-reported confidence in their reports, I develop and estimate a Bayesian model of (editorial) decision-making under uncertainty, isolating editors' preferences for novelty from risk aversion and accurate statistical discrimination. Structural estimates imply that incorrect beliefs or seniority bias fully explain why the novel ideas of junior authors are relatively undervalued.

Work in Progress

The Human Capital Mobility of Immigrants in the Age of Mass Migration

Honors and Awards

Highest Honors in Economics, UC Berkeley 2024
Carlos Rodríguez-Pastor Family Scholarship 2020

Other Experience

Beyond the Arc 2024
Data Science Intern
- Built full-stack Next.js app for AI-based search and drafting of nuclear regulatory documents
- Implemented retrieval-augmented generation (RAG) with OpenAI embeddings and Supabase
- Developed responsive TypeScript and React frontend for interacting with backend processes

Center for AI Safety 2022
Machine Learning Safety Scholar
- Implemented PGD adversarial attacks, anomaly detectors, and Trojan backdoors in PyTorch
- Built CNNs with batch normalization from scratch and trained them on CIFAR-10 image data

Personal

Languages: English (fluent), Spanish (native)
Citizenship: Chilean

References

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