AAKASH KALYANI

PhD Economics · Boston University ◇ aakashk@bu.edu
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EDUCATION

Boston University *2017-2023 (Expected)*
PhD Economics (6th year)
Fields: Macroeconomics, Finance, Labor Economics

Delhi School of Economics, University of Delhi *2013-2015*
Masters in Economics
First Division

Netaji Subhas Institute of Technology, University of Delhi *2008-2012*
Bachelor of Engineering in Electronics and Communication
First Division

WORKING PAPERS

The Creativity Decline: Evidence from US Patenting *Draft coming soon* *2022*

Diffusion of Disruptive Technologies (link) *2021*
with Nicholas Bloom, Tarek Hassan, Josh Lerner and Ahmed Tahoun

WORK IN PROGRESS

International Migration and Knowledge Diffusion

Gender, Missing Innovations, and Economic Growth

FELLOWSHIPS

Henry S. Newman Graduate Student Fellowship *Sep. 2021 - May. 2022*
Boston University

OTHER POSITIONS

Visiting Fellow *Aug. 2022-Current*
Department of Economics, Harvard University

PRESENTATIONS

2022

· Society of Economic Dynamics (Madison, Wisconsin); Green Line Macro Meeting (*Boston University-Boston College Joint Conference*);

PRESENTATIONS

2021

· Economic Growth Conference (*NBER Summer Institute 2021*); Economic Fluctuations and Growth Conference (*NBER*); Changing Nature of Innovation - Macro Perspectives (*Centre for Technology, Innovation and Economic Research, India*); Economics Seminar (*Duke University*)

2020

· Bocconi Assembly for Innovation and Cooperation (*University of Bocconi, Italy*); Economics Seminar (*Yeshiva University*); Economics Seminar (*Nova School of Business and Economics, Portugal*)

REFEREEING EXPERIENCE

Review of Economic Dynamics

WORK EXPERIENCE

Research Assistant to Tarek Hassan *Jan. 2019 - May. 2021*
Boston University

Teaching Assistant for Introductory Statistics *Aug. 2018 - Dec. 2018*
Boston University

Lecturer, Econometrics and Mathematical Economics *Jul. 2016 - Jul. 2017*
Indian School of Business and Finance

Research Associate *Jul. 2015 - Jul. 2016*
Centre for Advanced Financial Research and Learning, Reserve Bank of India

Analyst *Jul. 2012 - July 2013*
The Smart Cube, Delhi, India

TECHNICAL SKILLS

Python, Stata, MATLAB, R, Mathematica, LaTeX

REFERENCES

Tarek Alexander Hassan
Boston University
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Pascual Restrepo
Boston University
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Nick Bloom
Stanford University
579 Jane Stanford Way, Stanford CA 94305
nbloom@stanford.edu

Josh Lerner
Harvard Business School
Rock Center for Entrepreneurship, Room 314, Boston, Massachusetts 02163 USA
josh@hbs.edu

CITIZENSHIP

F1, Indian Citizen

LANGUAGES

English, Hindi

WORKING PAPERS

The Creativity Decline: Evidence from US Patenting (Draft coming soon)
Job Market Paper
I argue that the rise in patenting and a slowdown in productivity in recent years is explained by the falling share of creative patents. To separate creative from derivative patents, I use patent text to develop a new measure of patent creativity: the share of new technical two-word combinations in a patent. I show that only creative patents are associated with improvements in firm level productivity and market valuations. In an endogenous growth model, I show that ageing and decreasing government support for research and development explain about a third of the decline in creativity and the slowdown in productivity.

Diffusion of Disruptive Technologies (with Nicholas Bloom, Tarek Hassan, Josh Lerner and Ahmed Tahoun)
We identify novel technologies using textual analysis of patents, job postings, and earnings calls. Our approach enables us to identify and document the diffusion of 29 disruptive technologies across firms and labor markets in the U.S. Five stylized facts emerge from our data. First, the locations where technologies are developed that later disrupt businesses are geographically highly concentrated, even more so than overall patenting. Second, as the technologies mature and the number of new jobs related to them grows, they gradually spread geographically. While initial hiring is concentrated in high-skilled jobs, over time the mean skill level in new positions associated with the technologies declines, broadening the types of jobs that adopt a given technology. At the same time, the geographic diffusion of low-skilled positions is significantly faster than higher-skilled ones, so that the locations where initial discoveries were made retain their leading positions among high-paying positions for decades. Finally, these pioneer locations are more likely to arise in areas with universities and high skilled labor pools.