- **Name:** Aruj Shukla

- **Contact Information:**
  - *Address:* 1115 ½ Mohawk Street, Los Angeles, CA 90026
  - *Email:* arujshuk@usc.edu
  - *Mobile:* +1 202-560-2460

- **School:** University of Southern California

- **Area of Interest:** Firms, Labor Economics, Organizational Economics

- **PhD Entry year:** 2022

- **Expected year of completion:** 2027

- **Faculty Reference:** Vittorio Bassi

Aruj Shukla

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Los Angeles, CA 90089 USA

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RESEARCH INTERESTS

Firms, Labor Economics, Organizational Economics

EDUCATION

Ph.D. Economics
University of Southern California
2022–

MPP International Development Policy
Georgetown University
2018–2020

B.Eng. Materials Science & Engineering
Nanyang Technological University, Singapore
2010–2014

RESEARCH

Working Papers

2024 G. Barboni, A. Bhattacharya, E. Field, R. Pande, N. Rigol, S. Schaner, A. Shukla, and C. Troyer Moore "A Tough Call: Understanding the Impact of Mobile Technology on Women's Work, Gender Gaps, Social Norms, and Misinformation" *EGC Discussion Papers. 1109* [paper]

2024 A. Shukla "Supplying Vocational Training Institutes: Evidence from India" [email for draft]

In Progress

- *Worker Turnover, Wage Contracts, and Firm Productivity in Uganda's Manufacturing Sector*
  with Virginia Minni & Anna Vitali
- *A Tough Call: Understanding the Impact of Mobile Technology on Women's Work, Gender Gaps, Social Norms, and Misinformation*
  with Giorgia Barboni, Anwesha Bhattacharya, Erica Field, Charity Troyer Moore, Rohini Pande, Natalia Rigol, and Simone Schaner [3ie Registry]

Technical Reports

- *Scaling Gender-Inclusive Social Audits: Preliminary Insights from Process Monitoring & a Randomized Controlled Trial*
  with Akash Bhatt, Madhulika Khanna, Simone Schaner, Charity Troyer Moore, and Natalie Theys [email for draft]
- *Teacher Value Added & Non-Cognitive Traits: Evidence from Pakistan* [email for draft]

PROFESSIONAL EXPERIENCE

2024 Summer Research Assistant for Virginia Minni (UChicago) & Anna Vitali (NYU)
Kampala, Uganda

2023 Summer Research Assistant for Vittorio Bassi
Economics Department, USC | Los Angeles, USA

2020–22 Pre-Doctoral Research Fellow for Simone Schaner
Worked on projects in social safety nets, governance, financial inclusion, and gender economics
Center for Economic & Social Research (CESR), USC | Los Angeles, USA

2019–20 Graduate Research Assistant for Andrew Zeitlin
Worked on projects in cash transfers, tax, and education.
McCourt School of Public Policy/gui^{2}de | Washington DC, USA

2017–18 Data Associate
Swaniti Initiative | New Delhi, India

2014–17 Drilling Engineering Consultant
Stuart Wright Pte Ltd | Singapore

TEACHING EXPERIENCE

2023–25 Teaching Assistant
Principles of Microeconomics
Economics Department, USC | Los Angeles, CA

2019–20 Teaching Assistant
Impact Evaluation for Development, Regression Methods & Analysis, Intermediate Microeconomics
McCourt School of Public Policy, Georgetown University | Washington DC

AWARDS & GRANTS

2024 International Growth Centre (IGC) Full Research Grant [£60,000]
(with Virginia Minni & Anna Vitali)

2024 Weiss Fund for Research in Development Economics [$5,000]
(with Marco Lo Faso)

2024 Summer Research Award [$4,000]
University of Southern California

2022–23 Graduate School Fellowship
University of Southern California

2018–20 McCourt School merit-based scholarship
Georgetown University

LANGUAGES & TECHNICAL SKILLS

Software Stata, R, LaTeX, Git, MATLAB

Language English, Hindi

Updated February 2025

I am writing to express my interest in the NBER Entrepreneurship Research Bootcamp 2025. Currently a third-year PhD student in Economics at the University of Southern California, I study firms and labor markets in developing countries. My current research explores themes in firm growth, relational contracts, worker retention, and informal insurance networks. The boot camp's focus on related themes provides an invaluable opportunity to not only learn from frontier research in entrepreneurship but also forge networks with the next generation of scholars furthering this agenda.

Against the backdrop of Uganda's manufacturing sector, my co authors and I are pursuing two distinct but related projects on the constraints to firm growth. First, we examine the role of wage contracts—that provide no earnings insurance—in inducing excessive worker separations and self-employment, and subsequent low productivity and firm growth. Using a combination of discrete-choice experiments, high-frequency surveys, and the structural estimation of a job ladder model, this work will provide insights into contractual frictions and how firms compete in settings with low, uncertain demand and market failures. Second, we link demand-side constraints and the prevalence of informal firm-to-firm and employer-employee relations to examine how demand size and volatility affect the organization of production. Through a series of demand experiments, we aim to capture the firm's response—either by hiring, outsourcing, or forging partnerships—to exogenous demand shocks. This work promises to shed light on the relative costs of internal versus external scaling and the role of flexible production systems in adapting to market volatility.

Informed by the nature of wage contracts prevalent in developing economies, I am also developing a research agenda to better understand the economic lives of the urban poor. In absence of social safety nets and regular wages, workers rely on a combination of savings as well as village and urban networks to weather health and labor market shocks. Leveraging panel datasets across Sub-Saharan Africa & India, I quantify the extent of insurance and how such networks evolve with formalization and technological advancement, especially gig work. In future research, I aim to incorporate the role of firms and the digital payments ecosystem into designing a framework for unemployment insurance in settings characterized with low contract enforcement and costly verification.

Another branch of my research studies the impacts of internet and communication technology (ICT) in the developing world. Leveraging a regression-discontinuity design in the implementation of a smartphone distribution program in India, I find limited evidence of persistent effects across socio-economic outcomes. Working on this topic, I have taken a keen interest in innovation and knowledge diffusion in developing countries. For future research, I plan to isolate the role of government-led protectionism and favorable policies in the composition and performance of startups.

My best work comes out in collaborative settings where I am exposed to new ideas and can work with a diverse team to brainstorm exciting research possibilities. The boot camp promises to provide exactly that environment and pedagogy. As a third-year student with several ongoing projects, I am at a stage in my training where I will benefit tremendously from this exposure. I look forward to this opportunity for new research generation and getting feedback on existing work.

USC Dornsife
Dana and David Dornsife
College of Letters, Arts and Sciences

DEPARTMENT OF ECONOMICS
Vittorio Bassi
Assistant Professor of Economics

February 14th, 2025

Subject: Letter of Recommendation for Aruj Shukla

Dear NBER Entrepreneurship Research Boot Camp Selection Committee,

I am delighted to provide my strongest recommendation for Aruj Shukla's application to attend the NBER Entrepreneurship Research Boot Camp. Aruj is a third-year PhD student in Economics at USC, and as his main advisor, I have had the opportunity to mentor him closely.

Aruj's research agenda is centered on understanding the constraints to firm growth and worker welfare in developing economies. In coauthored work, Aruj is examining the role of wage contracts in worker retention and firm productivity, as well as the impact of demand-side volatility on firm organization and production choices in Uganda. In parallel, his independent work explores informal insurance networks for urban migrants in Sub-Saharan Africa and South Asia, quantifying how workers manage labor market risks in environments with limited social safety nets. Given his focus on novel aspects of firm and worker behavior in developing countries, his research is highly relevant to the field of entrepreneurship.

The NBER Entrepreneurship Research Boot Camp is a perfect fit for Aruj at this stage of his PhD. He has multiple ongoing projects that would benefit from engagement with leading researchers in the field, and he thrives in collaborative environments where he can exchange ideas and refine his approach. He has an outstanding work ethic, strong quantitative skills, and an ability to synthesize insights across different literatures. Moreover, his enthusiasm for research, combined with his collegial nature and strong communication skills, makes him an excellent participant who will contribute meaningfully to discussions at the Boot Camp.

Aruj has my highest recommendation. Please feel free to reach out if I can provide any further information.

Sincerely,



Vittorio Bassi
Assistant Professor of Economics
University of Southern California