# JINCI LIU

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ADDRESS
Institute for International Economic Studies (IIES)
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PERSONAL 刘金词 Born in 1997

#### **EDUCATION**

Institute for International Economic Studies, Stockholm University PhD in Economics	Expected 2026
UC Berkeley Haas School of Business Visiting Student, Host: Carolyn Stein	2024
National University of Singapore Master by Research in Economics, 5.0/5.0	2018 – 2020
The Chinese University of Hong Kong B.Soc.Sc in Economics, First Class Honors	2014 – 2018

#### **CURRENT RESEARCH INTERESTS**

Research Fields: Labor, Personnel, Organizational, and AI

Methodologies: Causal Inference, Structural Modeling, Machine Learning, and Large Language Models

#### JOB MARKET PAPER

#### Managing by Feedback

Abstract: This paper studies how managers affect workers' productivity through feedback. I analyze feedback during software code reviews and measure developers' productivity and retention using data from GitHub and LinkedIn. The dataset covers over 200 million feedback messages from 1.7 million teams. Using large language models, I classify feedback into different types along tone and information dimensions (e.g., toxic, positive, and constructive). I then estimate the causal effects of these feedback types on developers' outcomes. My instrumental variable design exploits random code reviewer assignments. I find that toxic feedback reduces developers' future code quantity and quality, whereas respectful criticism (negative but non-toxic) has no such detrimental effects. Positive feedback increases future code quality, improves developers' retention in the software industry, and generates spillovers to coworkers and other teams. Constructive feedback reduces future code quality because developers focus more on revising old code, which crowds out new code development. Finally, I measure manager quality by their value-added to developer productivity and show that feedback explains a substantial share of the variation in manager quality.

#### WORKING PAPERS

# How does the Division of Labor Affect Team Productivity? Evidence from GitHub

Abstract: Does the division of labor increase team productivity? This paper provides new evidence challenging the conventional view that specialization increases productivity. I create a panel dataset from GitHub, covering 35 million task allocations across 64,400 software development teams from 2017 to 2023. My result shows a negative relationship between team specialization and various productivity metrics, including output quality, quantity, and user issue resolution time. To identify causal effects, I exploit GitHub's introduction of an automatic task assignment feature, which evenly distributes tasks across team members. Using a matched difference-in-differences design, I find that adoption of this feature reduces specialization and leads to significant gains in productivity: output quality rises by 4%, output quantity by 21%. Team communication also increases by 13%, suggesting that

improved interaction and knowledge exchange are a key mechanism behind these productivity gains. These findings highlight a trade-off in non-routine production: while specialization increases task-specific human capital, it impedes cross-task knowledge spillovers that are essential for innovation.

Political Preferences and Migration Decisions of College-Educated Workers (with Mitch Downey) R&R: AEJ Applied Economics

Abstract: We study the consequences of political polarization along educational lines in the United States. Descriptively, we show that college graduates are now well to the left of non-college voters on economic and social issues and much more so than 15 years ago. We then estimate the causal effect of a Republican governor on college graduates' inter-state migration rates, finding that conservative governance substantially reduces the inflow of college-educated workers. Finally, we analyze a structural model of migration that quantifies the implications of plausible changes in political control for cross-state spillovers and college/non-college earnings inequality.

# The Demographic Impact of Adverse Rainfall in Rural China (with Wenjie Tian and Kang Zhou) R&R: Journal of Economic Behavior & Organization

Abstract: Using high-frequency monthly precipitation data, we investigate the demographic consequences of extreme rainfall variability, comprising extreme droughts and heavy rainfall, in rural China. We find that both forms of extreme weather increased fertility rates, particularly for male births, between 1990 and 1999. More than a decade later, individuals who experienced extreme weather conditions, especially heavy rainfall, in utero showed lower educational attainment compared to their unexposed counterparts. Notably, we identified the second trimester of pregnancy as the critical period, with exposure during this period exerting the most significant negative impact on adult educational outcomes. Analyzing the mechanism, we find that extreme weather events reduce household incomes and increase child mortality. These findings highlight the enduring demographic impacts of environmental disasters.

#### **WORK IN PROGRESS**

- Timely Feedback and Communication (with Huen Tat Au-Yeung) Field experiment, ongoing
- Power within Teams: How Decision Power Affects Productivity
- The Scope of Innovative Firms and Multi-Skilled Workers (with Chek Yin Choi)
- The Evolution of Jobs and The Rise of Women: 1939 2022 (with Arash Nekoei and Jósef Sigurdsson)
- · Can AI feedback motivate as human feedback?

#### **AWARDS & GRANTS**

Google Research Credit (EUR 3,000)	2023 – 2025
Carl Mannerfelt Foundation Research & Travel Grant (approx. USD 6,310)	2022 – 2024
Institute for Evaluation of Labour Market and Education Policy (IFAU) Research Grant (approx. USD 82,000)	2023
Jan Wallander and Tom Hedelius Stiftelse Research Stipend (approx. USD 53,450)	2021
National University of Singapore Admission Scholarship	2018
The Chinese University of Hong Kong Excellent Research Paper Award of CUHK–Mirrlees Award	2018

## **TEACHING**

Applied Empirical Economics I, Stockholm University PhD Economics	2022 - 2023
Econometric Modeling and Applications II, National University of Singapore PhD Economics	2020
Microeconomic Analysis I, National University of Singapore Undergraduate Economics	2020

#### **PRESENTATIONS**

2025: 1st Asian Conference on OrgEcon, IIES BrownBag, SOFI BrownBag, Hong Kong Labor Symposium, PSE-CEPR Policy Forum, CEPR Joint Workshop on IMO & ESF, SUDSWEC Conference (SSE), National PhD workshop in Finance (Swedish House of Finance)

**2024:** UC Berkeley Labor Lunch, UC Berkeley IO Workshop, UC Berkeley IO Therapy

2023: ENTER Jamboree (University of Mannheim), IIES BrownBag, Zhejiang University

2022: Stockholm University Labor Fika

2018: Trade and Industry Department HKSAR

## PROFESSIONAL SERVICE

**Referee Service:** Academy of Management Annual Conference

Departmental service: Co-organizer of the seminar series Labor Fika 2022 – 2024

Student representative, Working Environment and Equal Opportunities 2022 – 2023

#### RESEARCH EXPERIENCE

Institute for International Economic Studies Research Assistant	2020 – 2022
National University of Singapore Research Assistant for Bingjing Li	2018 – 2020
The Chinese University of Hong Kong Research Assistant for Ng Ka Ho and Hsieh Chih Shing	2017 – 2018

#### OTHER EMPLOYMENT

Real Estate Analytics (8PROP), Singapore Data Scientist Intern	2019 – 2020
Hong Kong Trade Development Council	2017
Summer Analyst	

# **COMPUTER SKILLS & LANGUAGES**

Stata, Python, R, LTFX, Git, Matlab, SQL Computing:

Mandarin (Native), English (Fluent), Cantonese (Fluent) Languages:

Piano (level 10) Personnel:

## **REFERENCES**

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