

# XIAOYI (SHERRY) TANG

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## EDUCATION

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### University of Chicago | Kenneth C. Griffin Department of Economics | Chicago, IL

*Master of Arts in the Social Sciences with Concentration in Economics; GPA: 3.82/4.0, June 2025*

**Advanced Courses:** Empirical Analysis I (PhD core metrics), Applied Econometrics (Booth PhD core), Energy and Environmental Economics III (2nd year PhD), Topics in Labor Markets: Earnings and Employment (2nd year PhD), Market Design (2nd year PhD), A Course In Experimental Economics (2nd year PhD), Mathematical Methods Camp (PhD level), Modern Methods for Applied Regression, Analysis in  $R^n$  II

### Minzu University of China | School of Economics | Beijing, China

*Bachelor of Arts in Economics (with honors); GPA: 91.8/100 (WES:3.89/4.0), June 2024*

**Relevant Courses:** Intermediate Macroeconomics (95/100), Mathematical Economics (96/100), Econometrics (90/100), Linear Algebra (96/100), Probability and Mathematical Statistics (93/100), Dynamic Optimization (91/100), Intermediate Microeconomics, Game Theory, Advanced Mathematics, Analysis of Economic Data (with Python), The Economics of Resources and Environment, Finance, Labor Economics

**Thesis:** "Children quantity, parental health and the potential mechanisms"

### The Hong Kong University of Science and Technology | Hong Kong SAR

*Post-baccalaureate studies, Economics; January 2024 - May 2024*

**Advanced Courses:** Quantitative Macroeconomics (PhD core macro)(audited), Convex and Nonconvex Optimization II (stats PhD course)(audited), Behavioral Economics and Public Policy (audited)

### University of California, Berkeley | Berkeley, CA

*Visiting Undergraduate Student; GPA: 3.89/4.0, January 2022 - May 2022*

**Relevant Courses:** Industrial Organization (2nd year PhD)(A), Development Economics (A), Concepts of Statistics (A-)

## RESEARCH EXPERIENCE

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### • Predoctoral Research Fellow at the Salata Institute at Harvard University: July 2025 - Present

**Advisors:** Prof. Wolfram Schlenker, Prof. Charles A. Taylor, Harvard University

- Wrote code to clean, process, analyze, and cross-walk 47GB data covering 4 years and 4,000,000 individuals; Constructed many >1TB databases, ensuring best practices were used in reproducibility and efficiently leveraging parallel processing
- Created the R script to build the crosswalk to solve the boundary change issue in census data, performed causal inference to see how the climate change impact long-term migration
- Used Google Earth Engine to get and processed satellite data for weather and climate; conducted times series analysis to see how CO2 shock can impact agricultural output
- Supported various research projects and met weekly with advisors, contributing to idea generation and project development; Conducted literature reviews; Produced figures, tables, and slides for presentations and working papers

#### **Selected Works with Research Contribution:**

- [Environmental Drivers of Agricultural Productivity Growth: CO<sub>2</sub> Fertilization of US Field Crops \(Charles Taylor & Wolfram Schlenker\)](#)
- [A Hedonic Social Cost of Carbon: Evidence from US Migration \(Tamma Carleton, Marco Tabellini, Charles A. Taylor\)](#)

### • Empirical Research on Labor Market: Research Assistant, January 2024 - May 2024

**Advisor:** Prof. C.Y. Kelvin Yuen, The Hong Kong University of Science and Technology

- Utilized Stata to measure treatment effects of minimum wage increase on employment rate for different types of workers using stacked DID method, developed event study graph
- Used wage-size premium method to estimate labor supply elasticity in several countries

### • The Occupational "Sticky Trap" of Digital Labor under Algorithm Control: Independent Research, January 2022 - June 2023

**Advisor:** Prof. Jing Liu, Minzu University of China

- Conducted 3-month field study and surveyed more than 200 individuals to know how digital labor feel about the "Sticky Trap" through questionnaires and in-depth interviews; Analyzed formation mechanism of "Sticky Trap" through qualitative research
- Performed data cleaning and data analysis with Python & R, and used Structural Equation Model with R lavaan package to explore the relationship between variables
- Operated Cronbach test by calculating  $\alpha$  values and Exploratory Factor Analysis (EFA) by calculating KMO statistics and Bartlett significances with SPSS

### • Empirical Research on Chinese Economic and Social Data: Research Assistant, April 2022 - October 2022

**Advisor:** Prof. Zhaopeng Frank Qu, Nanjing University

- Collected data and indicators of economic development such as GDP and Gini Coefficient and integrated databases, performing data cleaning and conducting data analysis and visualization with Stata and R maps & ggplot2

- Developed novel data processing framework for a recently released radiance dataset known as VNP46A2, part of NASA's Black Marble suite of Nightlight (NTL) products, utilizing QGIS and Python to calculate zonal economic statistics over multiple rasters using NTL data
  - Attended weekly research meetings with other researchers and shared interesting papers and ideas occasionally
- **The Effect of News Recommendation on Consumer Behavior:** Research Assistant, March 2022 - June 2022  
PIs: Yunhao Huang, Mengyao Huang & Yixiang Xu, UC Berkeley Haas School of Business (PhD students)
- Performed web scraping (e.g., Microsoft News, New York Times) on more than 60,000 English news articles to collect variables and indicators about consumer behavior with Python Pandas & Beautiful Soap
  - Used Propensity Score Matching and consumer clustering/classification algorithm with Random Forest in Python to explore whether building up and using consumer side as a basis of a simulated online learning environment can enhance performance of recommendation system

## PROFESSIONAL EXPERIENCE

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- **GUANGFA Securities Co., Ltd:** Equity Research Analyst Intern, October 2023 - December 2023
  - Updated databases & annual reports using Microsoft Access and Power BI, followed market trends, and conducted in-depth analysis of TMT industry and enterprises to aid investment decision-making
  - Performed corporate valuation for listed companies (Dividend Discount Model (DDM) and Discounted Cash Flow (DCF) model)
- **Ipsos Consulting Company:** Assistant Analyst Intern in Quantitative Research Department, June 2022 - August 2022
  - Assisted mentor to conduct data analysis and wrote key findings (completed the processing of more than 8,000 observations of data), and used Excel to conduct t-tests in A/B Testing
  - Operated data visualization by making Pivot Table in Excel and drawing bar charts and line charts in PowerPoint
  - Participated in the design of three medium-sized project questionnaires about consumer preferences, and removed unreasonable questionnaire results based on the screening requirements

## TEACHING EXPERIENCE

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- **Applied Econometrics (with Stata), Minzu University of China:** Teaching Assistant for Prof. Yu Bai, September 2023 - January 2024
  - Prepared course materials including Stata guidebooks & real-world data sets & Stata codes and grade assignments & exams
  - Organized sessions for students to show how to apply various econometrics methods using Stata with real-world data
  - Held office hours every two weeks to address some learning difficulties met by students

## CONFERENCES & WORKSHOPS

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- **CUHK RPg Students Summer Workshop:** Organized by Chinese University of Hong Kong, June 2024
  - Participant for the CUHK RPg (Research Postgraduate Studies) Students Recruitment Summer Workshop (Business Economics Track)
  - Passed the admission interview for RPg Students and received the PhD offer with fellowship (denied)
- **China 2023 Health & Aging Economics Summer Camp:** Organized by PKU-iGHD & Yale Institution for Social and Policy Studies, June 2023
  - Presented my working paper *Formation Mechanism and Impact of the Digital Laborers' Occupational "Sticky Trap" under Algorithms: Evidence from a Social Survey for Meituan Take-out Riders*
  - Participated in the field study about development economics and health economics with other researchers in Xichang, China, on-site (funded by the department); attended lectures by health economists from several countries

## FELLOWSHIP & AWARDS

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**Harvard Predoctoral Fellowship**, Harvard University, 2025-2026

**Gargoyle Research Scholarship (\$5,000)**, University of Chicago, 2024-2025

**M.A. Director's Scholarship (merit-based) (\$1,000)**, University of Chicago, 2024-2025

**Social Sciences Promise Scholarship (\$5,000)**, University of Chicago, 2024-2025

**Academic Distinction Scholarship (x3)**, Minzu University of China, 2020-2024

**Innovation Class for Top Talents in Economics (≈ honors program)**(selected 35 out of 600+), Minzu University of China, 2020-2024

**Special Award in Academic Works Competition for Chinese College Students** (Awarded to recognize students' academic potential), 2023

**Fei Hsiao-tung Award for Outstanding Academic Achievement** (Top 0.3%), Minzu University of China, 2023

**Honorable Mention in International Interdisciplinary Contest In Modeling (ICM)**, 2023

**Scholarship to Visit Top Universities in the World** (RMB 65,500), Minzu University of China, 2022

## SKILLS

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- **Programming:** R, Stata, Julia, Python, MATLAB, L<sup>A</sup>T<sub>E</sub>X, Markdown, Git, Google Earth Engine
- **Languages:** English (fluent), Chinese Mandarin (native), Chinese Cantonese (basic)