Liyang Sun

Employment

Lecturer, University College London, Economics

Untenured Associate Professor (on leave), CEMFI, Economics

Assistant Professor, CEMFI, Economics

Postdoctoral Research Fellow, UC Berkeley, Economics & Statistics

September 2023 - present
July 2022 - August 2023

July 2021 - June 2022

Education

Massachusetts Institute of Technology (MIT), Ph.D., Economics & Statistics

June 2021

Wellesley College, B.A., Economics & Mathematics (Summa Cum Laude)

May 2014

Professional Activities

Fund Internship Program, IMF

2020

Research Assistant, Shaanxi Normal University CEEE (Xi'an, China) - Stanford REAP

2017-2018

Research Assistant to Professor Heidi Williams, NBER

2014-2015

Publications

"Double Robustness for Complier Parameters and a Semiparametric Test for Complier Characteristics" with Rahul Singh

Accepted at *Econometrics Journal*

"A linear panel model with heterogeneous coefficients and variation in exposure" with Jesse M. Shapiro

Journal of Economic Perspectives (2022) 36(4), 193-204.

"Inference with Many Weak Instruments" with Anna Mikusheva Review of Economic Studies (2022) 89(5), 2663-2686.

"Estimating Dynamic Treatment Effects in Event Studies with Heterogeneous Treatment Effects" with Sarah Abraham

Journal of Econometrics (2021) 225(2), 175-199.

"Weak Instruments in IV Regression: Theory and Practice" with Isaiah Andrews and James Stock

Annual Review of Economics (2019) 11, 727-753.

 $\hbox{``Implementing Valid Two-step Identification-robust Confidence Sets for Linear Instrumental-variables Models''}$

Stata Journal (2018) 18(4), 803-825.

Working Papers

"Empirical Welfare Maximization with Constraints"

Best Paper Award: Methodology, NeurIPS Workshop on ML for Economic Policy, 2020

"Adapting to Misspecification" with Tim Armstrong and Patrick Kline

"Weak Identification with Many Instruments" with Anna Mikusheva

Selected Research Papers in Progress

"Using Multiple Outcomes to Improve the Synthetic Control Method" with Eli Ben-Michael and Avi Feller

Policy papers

"Structural Reforms and Economic Growth: A Machine Learning Approach" with Anil Ari and

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Gabor Pula

IMF Working Paper #2022/184

| Grants and | Fellowships |
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| Spanish Ministry of Science and Innovation Grant (€147,000, joint with Dmitry Arkhange | elsky and |
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| Siqi Wei) | 023-2025 |
| Ayudas Juan de la Cierva Formación Grant (€60,000, early termination) | 2023 |
| Jerry A. Hausman Graduate Dissertation Fellowship, MIT (\$40,000) | |
| Fanny Bullock Workman Fellowship, Wellesley (\$16,000) | 017-2018 |
| MIT Department of Economics Fellowship (\$64,000) | 015-2017 |
| Wellesley College Albright Institute Fellow | 2013 |
| Wellesley in Washington Fellowship | 2013 |
| Science Center Summer Research Fellowship, Wellesley | 2012 |
| Classical Studies Department McCann Fellowship, Wellesley | 2011 |
| Honors and Award | |
| Excellence in Refereeing Award, Review of Economic Studies | 2022 |
| Dennis Aigner prize for the best empirical paper published in the Journal of Econometrics | 3 2021 |
| MIT School of Humanities, Arts and Social Sciences Levitan Teaching Award | 2019 |
| Summa Cum Laude, Wellesley | 2014 |
| Phi Beta Kappa, Wellesley | 2014 |
| The Natalie Bolton Economics Student Prize, Wellesley | 2014 |
| The Natalie Bolton Faculty Prize in Domestic Economics, Wellesley | 2014 |
| Teaching Experience | |
| Applied Microeconometrics (Graduate), CEMFI | 2023 |
| Sole instructor and designer of the course | |

2021

2021

2018

2017-2018

Inference on Causal and Structural Parameters Using ML and AI (Graduate), MIT

Teaching Assistant to Professor Victor Chernozhukov Research and Communication in Economics (Undergraduate), MIT

Teaching Assistant to Professor Simon Jäger

Teaching Assistant to Professor Anna Mikusheva

Teaching Assistant to Professor Amy Finkelstein

Econometrics (Undergraduate), MIT

Public Finance (Graduate), MIT

Conference Presentations

- 2023 ASSA Winter Meeting, Econometrics Society Africa Meeting, Econometrics Society North America Summer Meeting, Munich Econometrics Workshop, The Bravo Center/JEA/SNSF Workshop on Using Data to Make Decisions, Econometrics Society European Summer Meeting, Interactions: Bringing Together Econometrics and Applied Microeconomics VIII, Stone Center at UCL Research Day
- 2022 University of Michigan Two-way Fixed Effects Workshop, California Econometrics Conference, American Causal Inference Conference, Aarhus Econometrics Workshop I, Stata Economics Virtual Symposium, Computational and Methodological Statistics (CMStatistics)
- 2021 ASSA Winter Meeting, Econometrics Jamboree, Southern Economic Association (SEA) Annual Meeting
- 2020 Women in Data Science (WiDS) Cambridge, Econometrics Society World Congress, National Association for Business Economics (NABE) Tech Economics Conference. NeurIPS Workshop on ML for Economic Policy, Econometric Society European Winter Meeting
- 2019 NeurIPS CausalML Workshop

Seminar Presentations

2023 Wellesley College, UCL, NYU, University of Warwick, University of Surrey, Universität Mannheim, University of Amsterdam, University of Exeter Business School, Chamberlain Seminar

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2022 Georgetown University, The University of British Columbia, UC Davis, University of Cambridge, Pompeu Fabra University, University of Southern California, The Chinese University of Hong Kong, CREST-PSE, Sciences Po, LMU München - Empirical Economics

2021 Brown University, CEMFI, Cornell University, Erasmus University Rotterdam, HKUST, LMU München, Microsoft - Office of the Chief Economist, Penn State, Princeton University, Università Bocconi, Universität Bonn, Universität Mannheim, UC Berkeley - Economics, UC Irvine, University College London, UC Santa Cruz, University of Essex, UW Seattle, UW Madison, VU Amsterdam, Wellesley College

2020 UC Berkeley - Statistics

Mini-Courses and Guest Lectures

2023 Advances in DiD Workshop (University of Exeter Business School), NBER Summer Institute Methods Lecture

Professional Service

| Co-organizer of the CEMFI Econometrics Seminar | 2022-2023 |
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| Program Committee Member, American Causal Inference Conference | 2022 |
| Program Committee Member, Econometric Society European Meeting | 2022,2023 |
| Grant application reviewer for National Science Foundation | |

Referee for

American Economic Review (2), American Economic Review: Insights (3), American Journal of Health Economics (1), Biometrika (1), Canadian Journal of Statistics (1), Econometrica (2), Economic Inquiry (1), Econometrics Review (1), Econometrics and Statistics (1), Econometrics Theory(1), Food Policy (1), Health Services and Outcomes Research Methodology (2), Journal of Applied Econometrics (4), Journal of Business & Economic Statistics (4), Journal of Econometrics (9), Journal of Economic Literature (1), Journal of the Royal Statistical Society: Series C (1), Journal of Urban Economics (1), Quantitative Economics (1), Quarterly Journal of Economics (3), Review of Economics and Statistics (6), Review of Economic Studies (9), Stata Journal (1)

Other Activities

MIT IDSS Student Council Secretary 2019-2020 MIT Econometrics Lunch Organizer 2018-2020

Updated: November 2023