

Date: September 5, 2024

Wayne Yuan Gao

Department of Economics
University of Pennsylvania
The Ronald O. Perelman Center
for Political Science and Economics
133 South 36th Street, Office 630
Philadelphia, PA 19104, USA

Email: waynegao@upenn.edu
Website: www.waynegao.com

Academic Appointments

University of Pennsylvania:

Assistant Professor, Department of Economics, 2020-current

Faculty Affiliate, Warren Center for Network and Data Sciences, 2019-current

Lecturer, Department of Economics, 2019-2020

Harvard University:

Visiting Assistant Professor, Department of Economics, Spring 2022

Education

Ph.D. Economics, Yale University, 2014-2019

M.A. Economics, Duke University, 2012-2014

Bachelor of Economics and Finance, University of Hong Kong, 2009-2012

Publications

1. “How Flexible is that Functional Form? Quantifying the Restrictiveness of Theories”, with Drew Fudenberg and Annie Liang, forthcoming in *Review of Economics and Statistics*.
2. “Using Monotonicity Restrictions to Identify Models with Partially Latent Covariates”, with Minji Bang, Andrew Postlewaite and Holger Sieg, *Journal of Econometrics*, 2023, 235(2), 892-921.
3. “Logical Differencing in Dyadic Network Formation Models with Non-Transferable Utilities”, with Ming Li and Sheng Xu, *Journal of Econometrics*, 2023, 235(1), 302-324.
4. “Informal Risk Sharing with Local Information”, with Attila Ambrus and Pau Milan, *Review of Economic Studies*, 2022, 89(5), 2329–2380.

5. “How Flexible is that Functional Form? Quantifying the Restrictiveness of Theories”, with Drew Fudenberg and Annie Liang, *Proceedings of the 22nd ACM Conference on Economics and Computation*, 2021, 497-498. (Award: Exemplary Artificial Intelligence and Computation Track Paper, ACM EC’21)
6. “Nonparametric Identification in Index Models of Link Formation”, *Journal of Econometrics*, 2020, 215(2), 399-413. (Award: The 2021 Arnold Zellner Award for Best Theory Paper Published in 2019-2020, *Journal of Econometrics*)
7. “Minimax Linear Estimation at a Boundary Point”, *Journal of Multivariate Analysis*, 2018, 165, 262-269.
8. “Structural Inference from Reduced Forms with Many Instruments”, with Peter C.B. Phillips, *Journal of Econometrics*, 2017, 199, 96-116.
9. “Informal Insurance Networks”, with Eunyong Moon, *B.E. Journal of Theoretical Economics*, 2016, 16, 455-484.

Working Papers

1. “Identification of Dynamic Nonlinear Panel Models under Partial Stationarity” (January 2024), with Rui Wang, arXiv:2401.00264.
2. “IV Regressions without Exclusion Restrictions” (July 2023), with Rui Wang, arXiv:2304.00626.
3. “A Partial Order on Preference Profiles” (April 2023), arXiv:2108.08465.
4. “Dynamic Heterogeneous Distribution Regression Panel Models, with an Application to Labor Income Processes” (January 2023), with Iván Fernández-Val, Yuan Liao and Francis Vella, arXiv:2202.04154. Revision and resubmission requested by *Quantitative Economics*.
5. “Two-Stage Maximum Score Estimator” (September 2022), with Sheng Xu and Kan Xu, arXiv: 2009.02854.
6. “Robust Semiparametric Estimation in Panel Multinomial Choice Models”, with Ming Li (March 2021), SSRN #3282293.

Work in Progress

1. Semiparametric Estimation of Integrals on Submanifolds, with Xiaohong Chen
2. RELU-Based Maximum Score Estimator, with Xiaohong Chen

Fellowships, Honors and Awards

Arnold Zellner Award for Best Theory Paper Published in 2019-2020, *Journal of Econometrics*

Exemplary Artificial Intelligence and Computation Track Paper, ACM Conference on Economics

and Computation, 2021

Arnold Zellner Thesis Award in Econometrics and Statistics, American Statistical Association,

2020

Irving B. Kravis Certificate for Distinction in Undergraduate Teaching, Penn, 2020

Review of Economic Studies European Tour, 2019

George Trimis Prize for Distinguished Dissertation in Economics, Yale, 2019

Grants

University Research Foundation Grant, UPenn: \$25,228, Mar. 2022 - Feb. 2023

Penn Undergraduate Research Mentoring Award, UPenn: \$9,000, Summer 2021

Invited Seminar Presentations

2024: Yale, Virginia, UCL, Warwick, WashU St. Louis; 2023: Columbia; 2022: HKUST, Maryland, UCLA, Harvard and MIT, Chicago, Northwestern, Wisconsin-Madison; 2021: Arizona, Essex, NUS & SMU, Michigan, NYU; 2020: Michigan, Syracuse, U Toronto, USC, BU; 2019: Georgetown, UCSD, UC Berkeley, UCL, Northwestern, Wisconsin-Madison, UPenn, NYU, Princeton, HKU, CUHK, SMU, PSU, LSE*, KU Leuven*, Sciences Po* (*: *Review of Economic Studies* European Tour).

Conference and Workshop Presentations

2024: North American Winter Meeting of the Econometric Society, North American Summer Meeting of the Econometric Society; 2023: North American Summer Meeting of the Econometric Society, CEME Conference for Young Econometricians (Georgetown); 2022: Pennsylvania Economic Theory Conference, Cowles Foundation Econometrics Conference, Asian Meeting of the Econometric Society, Greater New York Metropolitan Area Econometrics Colloquium; 2021: Asian Meeting of the Econometric Society, China Meeting of the Econometric Society; 2020: North American Winter Meeting of the Econometric Society; 2019: Network Econometrics Juniors' Conference (Northwestern), Microeconometrics Class of 2019 Conference (Duke), 30th International Conference on Game Theory (Stony Brook), Conference on Network Science in Economics (Indiana-Bloomington); 2018: Warren Center Workshop On Trade & Diffusion of Shocks in Networks (Penn), HU-HUE-SMU Tripartite Conference (SMU), Conference on Network Science in Economics (Vanderbilt), North American Meeting of the Econometric Society (UC Davis); 2017: Asian Meeting of

the Econometric Society (CUHK), Southern Economic Association Annual Meeting; 2016: Conference on Network Science in Economics (Stanford), Jerusalem Economics School (Hebrew)

Conference Organization

2024: NBER-NSF Time Series Conference at UPenn (program and organization committee), International Association of Applied Econometrics China Conference (program committee); 2023: North American Summer Meeting of the Econometric Society (program committee); 2021: China Meeting of the Econometric Society (program committee); 2019: 14th Greater New York Metropolitan Area Econometrics Colloquium at UPenn (program and organization committee), 30th International Conference on Game Theory at Stony Brook (session organizer)

Referee Services

American Economic Journal: Microeconomics, American Economic Review, American Economic Review: Insight, Journal of Business and Economic Statistics, Communication in Statistics, Econometrica, Journal of Econometrics, Econometrics Journal, Econometrics and Statistics, Econometric Theory, Journal of Economic Behavior and Organization, Economic Development and Cultural Change, Economic Journal, Economics Letters, Econometric Reviews, Journal of Economic Theory, Games and Economic Behavior, Journal of International Development, Journal of Machine Learning Research, Journal of Mathematical Economics, National Science Foundation (Proposal Review), International Economic Review, Review of Economics and Statistics, Review of Economic Studies, Journal of Political Economy, Quantitative Economics, Quarterly Journal of Economics

Other Professional Services

Discussant: AEA Annual Meeting 2022

Panelist, Gary Chamberlain Online Seminar in Econometrics

Member, Master's Alumni Advisory Board, Dept. of Economics, Duke University

Teaching

University of Pennsylvania:

ECON 8300: Topics in Advanced Econometrics (Fall 2022, 2023)

ECON 7300: Econometrics I, Fundamentals (Fall 2023)

ECON 7310: Econometrics II, Methods & Models (Spring 2023, 2024)

ECON 712-008: Econometrics of Networks (Fall 2021)

ECON 2300/100: Statistics for Economists (Spring: 2020, 2021; Fall: 2021, 2022, 2023)

Harvard University:

ECON 2140: Econometric Methods (Spring 2022)