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# Wayne Yuan Gao

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## Academic Appointments

Department of Economics, University of Pennsylvania:

Assistant Professor of Economics, 2020-current

Lecturer, 2019-2020

The Warren Center for Networks & Data Sciences, University of Pennsylvania:

Faculty Affiliate, 2019-current

## Education

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

*En Route*: M.Phil. & M.A. Economics, 2016

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

B. Economics & Finance, University of Hong Kong, 2009-2012

## Research Fields

Econometrics, microeconomic theory, economics of networks

## Publications

1. “Informal Risk Sharing with Local Information”, with Attila Ambrus and Pau Milan, forthcoming in *Review of Economic Studies*.
2. “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.
3. “Nonparametric Identification in Index Models of Link Formation”, *Journal of Econometrics*, 2020, 215(2), 399-413.

4. “Minimax Linear Estimation at a Boundary Point”, *Journal of Multivariate Analysis*, 2018, 165, 262-269.
5. “Structural Inference from Reduced Forms with Many Instruments”, with Peter C.B. Phillips, *Journal of Econometrics*, 2017, 199, 96-116.
6. “Informal Insurance Networks”, with Eunyoung Moon, *B.E. Journal of Theoretical Economics*, 2016, 16, 455-484.

## Working Papers

1. “A Partial Order on Preference Profiles” (Aug. 2021)
2. “Using Monotonicity Restrictions to Identify Models with Partially Latent Covariates” (Aug. 2021), with Minji Bang, Andrew Postlewaite and Holger Sieg, arXiv:2101.05847.
3. “How Flexible is that Functional Form? Quantifying the Restrictiveness of Theories” (Aug. 2021), with Drew Fudenberg and Annie Liang, SSRN #3580408.
4. “Logical Differencing in Dyadic Network Formation Models with Non-Transferable Utilities”, with Ming Li and Sheng Xu (Jul. 2021), arXiv:2001.00691: revised and resubmitted to the *Journal of Econometrics*
5. “Robust Semiparametric Estimation in Panel Multinomial Choice Models”, with Ming Li (Mar. 2021), SSRN #3282293.
6. “Two-Stage Maximum Score Estimator” (Oct. 2020), with Sheng Xu, arXiv: 2009.02854.

## Work in Progress

1. “Dynamic Heterogenous Distribution Regression Panel Models, with an Application to Earnings Dynamics”, with Iván Fernández-Val, Yuan Liao and Francis Vella
2. “A Unified Model of Network Bargaining and Network Formation”

## Fellowships, Honors and Awards:

- Exemplary Artificial Intelligence and Computation Track Paper, 22nd, 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, University of Pennsylvania, 2020

- George Trimis Prize for Distinguished Dissertation in Economics, Yale University, 2019
- *Review of Economic Studies* European Tour, 2019
- University Dissertation Fellowship, Yale University, 2018
- Carl Arvid Anderson Prize Fellowship in Economics, Cowles Foundation, 2017
- Cowles Foundation Fellowship, 2014-2018
- University Fellowship (Hastings Fellow), Yale University, 2014-2018
- First-Class Honours, University of Hong Kong, 2012
- HKU Foundation Scholarship, University of Hong Kong, 2009-2012
- Bank of East Asia 75th Anniversary Scholarships, 2011
- Shuping Scholarship, Shuping Foundation, 2006-2011

### **Invited Seminar Presentations**

- 2021: Arizona, Essex, NUS&SMU (scheduled)
- 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**

- 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 (U 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 (Tampa)
- 2016: Conference on Network Science in Economics (Stanford), Jerusalem Economics School (Hebrew)

## **Conference Organization**

- 2021 China Meeting of the Econometric Society (program committee member)
- 2019 14th Greater New York Metropolitan Area Econometrics Colloquium at UPenn (committee member), 30th International Conference on Game Theory at Stony Brook (organizer of the parallel session “Networks”)

## **Referee Services**

*American Economic Review, Econometrica, Journal of Econometrics, Econometrics Journal, Economic Theory, Journal of Economic Behavior and Organization, Economic Development and Cultural Change, Economic Journal, Journal of Economic Theory, Journal of International Development, Journal of Mathematical Economics, International Economic Review, Review of Economics and Statistics, Quantitative Economics, Quarterly Journal of Economics*

## **Other Professional Services**

Panelist, Gary Chamberlain Online Seminar in Econometrics (November 13, 2020)  
Member, Master’s Alumni Advisory Board, Dept. of Economics, Duke University

## **Teaching**

UPenn ECON 103: Statistics for Economists (Spring 2020, 2021)