

Gaurab Aryal

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Education

Ph.D. Economics, The Pennsylvania State University, 2010.

M.S. (Quantitative Economics), The Indian Statistical Institute, Delhi, 2004.

B.A. (Honors) Economics, *First Class Honors*, Sri Ram College of Commerce, University of Delhi, 2002.

Academic Positions

Associate Professor of Economics, Washington University in St. Louis, July 1, 2022 – (with Tenure)

Assistant Professor of Economics, University of Virginia, August 25, 2015 – June 30, 2022
(Tenured, June 3rd, 2022).

Post Doctoral Instructor, Economics Department, University of Chicago, Jan 2014 – August 24, 2015.

Assistant Professor, Research School of Economics, Australian National University, July 2010– Jan 2014 (confirmed/tenured starting July, 2013).

Research

Published/Accepted Articles (in reverse chronological order)

1. "Empirical Framework for Cournot Oligopoly with Private Information," with Federico Zincenko.
forthcoming **RAND Journal of Economics**
2. "Price Discrimination In International Airline Markets," with Charles Murry and Jonathan Williams.
forthcoming **Review of Economic Studies**
3. "Procurements with Bidder Asymmetry in Cost and Risk-Aversion," with Hanna Charankevich, Eugene Jeong and Dong-Hyuk Kim.
forthcoming **Journal of Business & Economic Statistics**

4. "Coordinated Capacity Reduction and Public Communication in the Airlines Industry," (2022)
with Federico Ciliberto and Benjamin T. Leyden.
Review of Economic Studies, vol. 89, issue 6, 3055-3084.
5. "Signaling and Employer Learning with Instruments," (2022)
with Manudeep Bhuller and Fabian Lange.
American Economic Review, vol. 112, No. 5, 1669-1702.
6. "An Empirical Analysis of Competitive Nonlinear Pricing," (2020)
with Maria F. Gabrielli.
International Journal of Industrial Organization, vol. 68, issue C, 102538
7. "Semiparametric Estimation of First-Price Auction Models," (2019)
with Maria F. Gabrielli and Quang Vuong.
Journal of Business & Economic Statistics, vol. 39, 2, 373-385.
8. "Empirical Relevance of Ambiguity in First Price Auctions," (2018)
with Serafin Grundl, Dong-Hyuk Kim and Yu Zhu.
Journal of Econometrics, vol. 204, 189-206.
9. "A Note on Kuhn's Theorem with Ambiguity Averse Players," (2014)
with Ronald Stauber.
Economics Letters, vol. 125, issue 1, pp. 110-114.
10. "Trembles in Extensive Games with Ambiguity Averse Players," (2014)
with Ronald Stauber.
Economic Theory, vol. 57, issue 1, pp. 1-40.
11. "A Point Decision for Partially Identified Auction Models," (2013)
with Dong-Hyuk Kim.
Journal of Business and Economic Statistics, vol. 31, no. 4, pp. 384-397.
12. "Testing for Collusion in Asymmetric First-Price Auctions," (2013)
with Maria F. Gabrielli.
International Journal of Industrial Organization, vol. 31, pp. 26-35.

Working Papers under Review or Revision

1. "Econometrics of Insurance Models,
with Multidimensional Screening," with Isabelle Perrigne and Quang Vuong.
(2nd-round Revise and Resubmit, at **Quantitative Economics**)
2. "Identifying a Screening Model with Multidimensional Consumer Heterogeneity."
(Revise and Resubmit at **Journal of Econometrics**)
3. "Valuing Pharmaceutical Drug Innovations,"
with Federico Ciliberto, Leland Farmer and Ekaterina A. Khmelnitskaya.

4. "Common-Subcontracting, Multimarket Contact and Airline Prices," with Dennis J. Campbell, Federico Ciliberto and Ekaterina A. Khmelnitskaya.
5. "Security Issuance, Institutional Investors and Quid Pro Quo: Lessons from SPACs," with Zhaohui Chen, Yuchi Yao and Chris Yung.

Work In Progress

1. "Auctioning Annuities," with Eduardo Fajnzylber, Maria F. Gabrielli and Manuel Willington.
2. "Dynamic 'Oil'Igopoly' with Private Information," with Yang Yu and Federico Zincenko.

Conference and Seminar Presentations

Conferences:

2023 WEAI Conference in San Diego*, 2023 AshEcon in St. Louis (discussant)*, 2022 FTC Microeconomic Conference (discussant), 20th Annual Int. Industrial Organization Conference 2022, MaCCI Annual Conference 2022, Quantitative Marketing and Economics Conference (UCLA, October 2021), DC-IO Day 2021 (University of Maryland, June 2021), 19th Annual Int. Industrial Organization Conference (April-May, 2021, Virtual), WEAI Conference 2021, TIAA Institute Fellows Symposium 2021 co-hosted by Pension Research Council at UPenn Wharton, Informs Annual Meeting 2020 (organizer of a session on Empirical Auctions), DC-MD-VA Econometrics Workshop 2020, 2020 Econometrics Society Meeting (San Diego), 2019 FTC Microeconomic Conference (discussant), 2019 Southern Economic Association, 2019 SITE Conference (Stanford), Barcelona Graduate School of Economics (Summer Forum 2019), 2018 Asia Pacific IO Conference (University of Melbourne), 2018 Southern Economic Association, 2018 FTC Microeconomics Conference, SITE (Stanford, 2018), DC-IO Day (University of Maryland, May 2018), Economics of Media and Communications Conference (Becker Friedman Institute, May 2018), 16th Annual Int. Industrial Organization Conference (April, 2018, Indiana Uni.), Research Triangle Econometrics Conference at Duke (2017), Southern Economic Association (2017), UVA-Richmond Fed Jamboree (2017), INFORMS (2017), NYU-Crate (2017, Discussant), 14th Annual Int. Industrial Organization Conference (April, 2016, Drexel Uni.), 26th Int. Game Theory Conference (Stony Brook Uni., July 2015), 25th Int. Game Theory Conference (Stony Brook Uni., July 2014), 12th Annual Int. Industrial Organization Conference (April, 2014, Northwestern Uni.), Market Design Conference (Uni. of Melbourne, 2013), Australasia Economic Theory Workshop (UQ, 2013), Game Theory Congress (Istanbul, 2012), Econometric Society (Denver, 2011), SITE (Stanford, 2009).

Seminars:

2023: Boston College, SciencesPo, TAMU **2022:** WUSTL, UBC (brownbag), University of Iowa, Rice University, TPRI Boston University. **2021:** Deakin Uni, University of

Arizona. **2020:** NYU Stern. **2019:** Uni. of Toronto, Penn State, Queens Uni., Uni. of Oslo. **2018:** Federal Trade Commission, Vanderbilt University. **2017:** Uni. of Pittsburgh, Texas A&M, Rice Uni., Washington Univ. at St. Louis. **2016:** Uni. of Toronto. **2015:** Penn State, Uni. of Michigan, UVA, UC at Riverside, Stanford Uni. (IO Lunch), USC, UBC. **2014:** Uni. of Chicago, Georgetown Uni., JHU., MSU. **2013:** UNSW, Uni. of Chicago, Melbourne Law School, Duke (IO/Public Lunch). **2012:** Bilkent Uni., Melbourne Uni., Uni. of Queensland. **2011:** LSE, Queen Mary Uni. of London, PSE, Tilburg Uni. (Center), Collegio Carlo Alberto. **2010:** Ohio State, Columbia University, IITAM (Mexico), Uni. of Sydney, ANU, Uni. of Queensland, NUS, Collegio Carlo Alberto. **2009:** Penn State.

Note:* scheduled

Honors, Awards, & Fellowships

Weidenaum Center on the Economy, Government, and Public Policy (Small Research Grant), WashU 2022-2023. \$10,000.

Seeding Projects for Enabling Excellence & Distinction (SPEED) Grant, WashU, 2022-2023. \$5,000.

Bankard Fund for Political Economy (Research Grant), UVA 2022-2023, with Federico Ciliberto. \$58,658.92. **(declined)**

College of Arts and Sciences' Quantitative Collaborative Grant, UVA 2021, joint with Federico Ciliberto. \$15,000.

3Cavaliers Program, UVA, 2021-2022, with Zhaohui Chen and Chris Young. \$15,000.

Bankard Fund for Political Economy (Research Grant), UVA 2021-2022, with Federico Ciliberto. \$59,990.40.

College of Arts and Social Science grant, UVA 2020. \$1,500.

College of Arts and Sciences' Quantitative Collaborative Grant, UVA 2020, joint with Federico Ciliberto. \$12,500.

College of Arts and Social Science grant, UVA 2019, joint with Federico Ciliberto. \$3,000.

Pension Research Council UPenn/TIAA-CREF Institute Partnership Grant, 2019-2020. \$36,500.

Bankard Fund for Political Economy (Research Grant), UVA 2019-2020. \$29,708.

Batten Research Grant Program, UVA 2018-2019, joint with Federico Ciliberto. \$20,000.

Bankard Fund for Political Economy (Research Grant), UVA 2018-2019, with Federico Ciliberto. \$59,777.

College of Arts and Social Science grant, UVA 2018, joint with Federico Ciliberto. \$3,000.

College of Arts and Social Science grant, UVA 2017, joint with Federico Ciliberto. \$3,000.

Faculty Research Grant, Australian National University, 2012-2013. AU\$7,500.00.

Visiting Research Fellowship, Collegio Carlo Alberto, 2010.

Faculty Research Grant, Australian National University, 2010-2011. AU\$10,000.00.

Research Fellow, Penn State University, Fall 2007-Spring 2010, sponsored by NSF grant for Isabelle Perrigne and Quang Vuong.

Summer Research Fellowship, Penn State University, 2007.

Graduate Fellowship, Indian Statistical Institute, Fall 2002- Spring 2004.

Teaching

Washington University in St. Louis:

Auction Theory and Practice (UG: S-2023)

Topics in Empirical Industrial Organization (G: S-2023).

University of Virginia:

Auction Theory and Practice (UG: F-2015, S-2016, F-2017, F-2019, S-2019, F-2020, S-2020, F-2020, S-2021, F-2021, S-2022).

Intermediate Microeconomics (UG: F-2016, F-2017).

Empirical Industrial Organization (G: S-2017, S-2018, S-2019, S-2020, S-2021, S-2022 co-teaching with Federico Ciliberto).

Empirical Industrial Organization (UG: S-2018, S-2019, S-2020, S-2021, S-2022 co-teaching with Federico Ciliberto).

University of Chicago:

Introduction to Industrial Organization (UG: Winter 2014, Spring 2014, Winter 2015, Spring 2015).

Mechanism Design (UG: Spring 2014, Spring 2015).

Australian National University:

Microeconomics (UG Honors: Fall 2010, Fall 2011, Fall 2012).

Applied Microeconometrics (G: Fall 2011, Fall 2012, Fall 2013).

Case Studies in Applied Economics (G: 2013).

Pennsylvania State University: Microeconomics (UG: many semesters)

Undergraduate Advising

1. University of Virginia (Distinguished Major Program Thesis Advisor)
 - (a) Chenchen (Sabrina) Peng: graduated May 2020.
Best paper *Annual International Atlantic Economic Society Undergraduate Paper Competition*.
Best Distinguished Majors Thesis Award.
 - (b) Chang (Margaret) Cheng: graduated May 2021.
 - (c) Lam K. Bui: graduated May 2022.
2. Australian National University:
 - (a) Lev Yulin: graduated 2012.
 - (b) Jabulani Bulle: graduated 2012.

Ph.D. Advising

Student	My Role	PhD Yr.	First Placement	Now at
University of Virginia				
Benjamin Leyden ^{†,‡}	3 rd reader	2018	Cornell University, Dyson	-
Cailin Slattery ^{‡,♣,★}	3 rd reader	2019	Columbia University, GSB	UC Berkeley, Hass
Alexander Gross [♣]	2 nd reader	2020	DOJ, Antitrust Division	-
Emily Cook ^{‡,♣}	3 rd reader	2020	Tulane University	-
Ekaterina Khmel'nitskaya ^{‡,♣}	2 nd reader	2021	Sauder School of Business	-
Gayoung Ko ^{b,‡}	2 nd reader	2022	University of Tennessee	-
Jiafeng Wu	2 nd reader	2023	Freddie Mac	-
Dennis J. Campbell	2 nd reader	2023	NERA	-
Moonju Cho ^b	2 nd reader	TBD		
Yang Yu ^b	2 nd reader	TBD		
Anirban Chattopadhyaya	2 nd reader	TBD		
Ashwin Nair	3 rd reader	TBD		
Washington University STL				
Minsung Park	3 rd reader	2023	Korea Institute for Industrial Economics and Trade	

Awards: ♣ Tipton R. Snavelly Best Thesis Award. † Snavelly Award for Best Dissertation.
‡ Snavelly Prize for Best Dissertation Proposal. ★ National Tax Association Dissertation Award. ^b Tipton Snavelly Award for Outstanding Summer Research.

Services

Conference Session Organizer

INFORMS Annual Meetings 2020 (empirical auction session).

Conference Session Invited Discussant

IIOC, NYU Crate, AEA, SEA, FTC Microeconomic Conference.

University/Department Services

1. University of Virginia

- (a) Member of the Recruiting Committee for the *Kenneth Elzinga Chair in Economics and Law*, Fall 2021 and Spring 2022.
- (b) Co-organizer of Bankard Workshop in IO/Theory Committee, Spring 2019; 2019-2022.
- (c) Bankard Workshop in Applied Microeconomics, Fall 2016- Spring 2017.
- (d) Member of the Distinguish Major Program Committee, Spring 2016, Spring 2022.
- (e) Junior Recruiting Committee, Fall 2016.
- (f) Member of the Core Exam committee for Econometrics, 2017, 2018, 2020, 2021, 2022.
- (g) Organizer of the Junior Lunch Seminar, 2017.
- (h) Organized reading group for graduate student, 2018, 2019.

2. Washington University in St. Louis

- (a) Co-chair of the hiring committee 2022-2023.