

# Kyungchul Song

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## Contacts:

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Vancouver, BC  
Canada, V6T 1L4  
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## Employment:

Professor of Economics, University British Columbia (2020-Present)  
Associate Professor of Economics, University of British Columbia (2011-2020)  
Assistant Professor of Economics, University of Pennsylvania (2005-2011)

## Education:

Yale University, Ph D., Economics, 2005  
Yale University, M.A., Economics, 2002  
Seoul National University, M.A., Economics, 2000  
Seoul National University, B.A., Economics, 1998.

**Dissertation Title:** *Semiparametric Specification Testing in Econometrics and Heterogeneous Panel Modeling* (Supervisor: Peter C. B. Phillips)

## Awards and Grants:

Arnold Zellner Award for the Best Theory Paper in *Journal of Econometrics*, 2023  
Journal of Econometrics Fellow, 2022.  
The Econometric Theory Multa Scripsit Award (from the journal *Econometric Theory*), 2018.  
Insight Grants from Social Science and Humanities Research Council of Canada,  
(2012-2015, 2016-2019, 2020-2025)  
Young Scholar's Award, The Korea-America Economic Association, January, 2010.  
Carl Arvid Anderson's Prize, Cowles Foundation, 2003/2004.

## Publications:

"The Law of Large Numbers for Large Stable Matchings," (with Jacob Schwartz), 2023, Accepted in *Journal of Econometrics*.

"Measuring Diffusion over a Large Network," (with Xiaoqi He) *Review of Economic Studies*, 2023, Forthcoming.

"Some Impossibility Results for Inference with Cluster Dependence with Large Clusters," (with Denis Kojevnikov) *Journal of Econometrics*, 2023, 237, 105524.

"Econometric Inference on a Large Bayesian Game with Heterogeneous Beliefs," (with Denis Kojevnikov) *Journal of Econometrics*, 2023, 237, 105502.

"A Decomposition Analysis of Diffusion Over a Large Network," *Econometric Theory*, 2022, 38, 1221-1252, Special Issue: Yale 2018 Conference in Honour of Peter C. B. Phillips.

"A Berry-Esseen Bound for Vector-valued," (with Denis Kojevnikov), *Statistics and Probability Letters*, 2022, 186, 109448.

"Estimation and Inference on Treatment Effects Under Treatment-Based Sampling," (with Zhengfei Yu), *Econometrics Journal*, 2022, 25, 554-575.

- “Multiple Testing and the Distributional Effects of Accountability Incentives in Education”, (with Steven Lehrer and Vincent Pohl), *Journal of Business and Economic Statistics*, 2022, 40,1552-1568
- “Estimating Unobserved Agent Heterogeneity Using Pairwise Comparisons”, (with Elena Krasnokutskaya and Xun Tang), *Journal of Econometrics*, 2022, 226, 477-497.
- “Counterfactual Analysis Under Partial Identification Using Locally Robust Refinement”, (with Nathan Canen), *Journal of Applied Econometrics*, 2021, 36, 416-436.
- “Limit Theorems for Network Dependent Processes”, (with Vadim Marmer and Denis Kojevnikov) *Journal of Econometrics*, 2021, 222, 882-908.
- “A Uniform-in-P Edgeworth Expansion under Weak Cramér Conditions”, *Statistics*, 2020, 54, 926-950.
- “Estimating Local Interactions among Many Agents Who Observe Their Neighbors”, (with Nathan Canen and Jacob Schwartz) *Quantitative Economics*, 2020, 11, 917-956.
- “The Role of Quality in Internet Service Markets”, (with Elena Krasnokutskaya and Xun Tang), *Journal of Political Economy*, 2020, 128, 75-117.
- “Monte Carlo Inference on Two-Sided Matching Models”, (with Taehoon Kim, Jacob Schwartz, and Yoon-Jae Whang) *Econometrics*, 2019, 7, 1-15.
- “Stable Limit Theorems for Empirical Processes under Conditional Neighborhood Dependence”, (with Ji Hyung Lee) *Bernoulli Journal*, 2019, 25, 1189-1224.
- “Testing for a General Class of Functional Inequalities”, (with Sokbae Lee and Yoon-Jae Whang) *Econometric Theory*, 2018, 34, 1018-1064.
- “Measuring the Graph Concordance of Locally Dependent Observations”, *Review of Economics and Statistics*, 2018, 100, 535-549.
- “Simulated MLE for Discrete Choices using Transformed Simulated Frequencies”, (with Donghoon Lee) *Journal of Econometrics*, 2015, 187, 131-153.
- “Minimax Estimation of Nonregular Parameters and Discontinuity in Minimax Risk”, *Essays in Honor of Peter C. B. Phillips, Advances in Econometrics*, 2014, Vol 33, 557-585.
- “Local Asymptotic Minimax Estimation of Nonregular Parameters with Translation-Scale Equivariant Maps,” *Journal of Multivariate Analysis*, 2014, 125, 136-158
- “Semiparametric Models with Single-Index Nuisance Parameters”, *Journal of Econometrics*, 2014, 178, 471-483
- “Point Decisions for Interval-Identified Parameters,” *Econometric Theory*, 2014, 30, 334-356.
- “Testing Functional Inequalities,” (with Sokbae Lee and Yoon-Jae Whang) *Journal of Econometrics*, 2013, 172, 14-32.
- “On the Smoothness of Conditional Expectation Functionals,” *Statistics and Probability Letters*, 2012, 82, 1017-1024.
- “Testing Predictive Abilities and Power Robustification,” *Journal of Business and Economic Statistics*, 2012 30, 288-296.

“Testing Single-Index Restrictions with a Focus on Average Derivatives,” (with Juan Carlos Escanciano), *Journal of Econometrics*, 2010, 156, 377-391.

“An Improved Bootstrap Test of Stochastic Dominance,” (with Oliver Linton and Yoon-Jae Whang), *Journal of Econometrics*, 2010, 154, 186-202.

“Testing Semiparametric Conditional Moment Restrictions using Conditional Martingale Transforms,” *Journal of Econometrics*, 2010, 154, 74-84.

“Testing Conditional Independence via Rosenblatt Transforms,” *Annals of Statistics*, 2009, 37, 4011-4045.

“Uniform Convergence of Series Estimators over Function Spaces” *Econometric Theory*, 2008, 24, 1463-1499.

“Bootstrapping Cointegrating Regressions,” (with Yoosoon Chang and Joon Y. Park) *Journal of Econometrics*, 2006, 133, 703-739.

### **Working Papers:**

“A Decomposition Approach to Counterfactual Analysis in Game-Theoretic Models” (with Nathan Canen).

“Synthetic Decomposition for Counterfactual Predictions”, (with Nathan Canen).

“Estimating Dynamic Spillover Effects along Multiple Networks in a Linear Panel Model” (with Clemens Possnig and Andreea Rotarescu).

“Ordering-Free Inference from Locally Dependent Data”.

### **Invited Talks and Conference Presentations:**

2023: University of Toronto, University of Norte Dame, North America Summer Meeting (UCLA, USA), Asia Meeting (Singapore), California Econometrics Conference (Seattle, USA), AiE Conference in Honor of Joon Park (Indiana University, USA), University of Wisconsin-Madison, Canadian Econometrics Study Group Meeting (McMaster University) (Discussant, Poster Presentation).

2022: Seoul National University, IAER Econometrics Workshop, Conference on Modern Data Structures (Toulouse, France). University of Illinois-Urbana Champaign, University of Victoria, University of Pennsylvania, University of Calgary.

2021: Vanderbilt University, Penn State University, Cowles Foundation Summer Conference (Discussant, Yale University). North American Summer Meeting, EEA-ESEM Congress,

2020: Vanderbilt University (Cancelled due to COVID19), CIREQ Montreal Econometrics Conference (Cancelled due to COVID19), Econometric Methods for Modern Data Structures (University of Cambridge) (Cancelled due to COVID19), University of Warwick.

2019: UC San Diego, UCLA, Asia Meeting (Xiamen), Indiana University, Michigan State University, Northwestern University.

2018: University of Connecticut, McMaster University, Asia Meeting (Seoul), Conference in Celebration of Peter Phillips’ 40 Years at Yale University, Harvard/MIT, Brown University, Rice University, Texas A&M.

2017: University of Colorado at Boulder, University of Southern California, Asia Meeting (Hong Kong), Cowles Foundation Summer Conference (Yale University), Canadian Econometrics Study Group Meeting (Discussant), University of Chicago.

2016: University of British Columbia (Department of Statistics), North American Summer Meeting of Econometric Society (Philadelphia), KEA International Conference (Seoul), Asia Meeting (Kyoto), Cemmap Conference in Kyoto, Seattle-Vancouver Econometrics Conference (Vancouver), Canadian Econometrics Study Group Meeting (London, ON)

2015: UC Davis, Cemmap Conference in Seoul, Econometric Society World Congress, Yale University, UC Berkeley, The INET Conference on Networks (Discussant) (University of Southern California), University of Toronto

2014: Econometric Society North American Summer Meeting, KEA-KAEA Summer Meeting, Seattle-Vancouver Econometrics Conference, Duke University, University of Southern California, UC San Diego.

2013: Queens University, Boston College, Cowles Conference at Yale University, Canadian Econometrics Study Group Meeting (Discussant), University of Washington, The 14<sup>th</sup> Advances in Econometrics Conference in Honor of Peter, C. B. Phillips. University of Texas at Dallas.

2012: Seoul National University, University of Wisconsin-Madison, Conference on Partial Identification and Statistical Decisions (Cornell University), KEA-KAEA Summer Conference, Econometric Society North American Summer Meeting, WEAI Conference, Summer Workshop at Center for Econometrics (Seoul National University).

2011: Boston University, University of Texas at Austin, University of Rochester, IUPUI, Cemmap Seminar (UCL)

2010: Indiana University, World Congress in Shanghai, University of Montreal, Midwest Econometrics Study Group Meeting, University of British Columbia, Canadian Econometrics Meeting, University of Iowa, Greater NY Econometrics Colloquium (New York University)

2009: Far Eastern Econometric Society Meeting (University of Tokyo), Midwest Econometric Group Meeting, Brown University, UCLA, Vanderbilt University, Greater NY Econometrics Colloquium (Brown University)

2008: New Zealand Econometric Study Group Meeting (U of Auckland), Vanderbilt University, Lehigh University, Greater NY Metropolitan Econometrics Colloquium (Princeton University)

2007: Indiana University, University of Michigan, Ohio State University, Korean Econometric Society Summer Meeting (Invited Speaker), New York University, London School of Economics, University of Virginia

2006: ASSA Conference (KAEA), Columbia University, Penn State University, Rutgers University, Texas A&M. The Greater New York Metropolitan Econometrics Colloquium (Yale University) UC Riverside, UCLA.

2005: University of Pennsylvania, Stanford University, University of Wisconsin-Madison, University of Arizona, University of California San Diego, New York University, the Greater New York Metropolitan Econometrics Colloquium (Columbia University)

2004: University of Illinois-Urbana Champaign

**Referee Activities:**

Bernoulli Journal, Econometric Theory, Econometrics Review, Econometrica, International Economic Review, International Journal of Forecasting, Israel Science Foundation, Journal of the American Statistical Association, Journal of Applied Econometrics, Journal of Econometrics, Journal of Business, and Economic Statistics, Journal of Economic Dynamics and Control, Journal of Economic Inequality, Journal of Financial Econometrics, Journal of Multivariate Analysis, Journal of the Royal Statistical Society, Journal of Statistical Planning and Inference, Journal of Time Series Analysis, Journal of Time Series Econometrics, National Science Foundation, Oxford Bulletin of Economics and Statistics, Quantitative Economics, Review of Economic Studies, Review of Economics and Statistics, Statistica Sinica, Studies in Nonlinear Dynamics and Econometrics, Scandinavian Journal of Statistics, Test.

**Teaching Activities:**

## University of British Columbia

Econ 325 (Introduction to Econometrics I) (undergraduate)  
 Econ 327 (Introduction to Empirical Methods) (undergraduate)  
 Econ 425 (Advanced Econometrics) (undergraduate)  
 Econ 490 (Seminar in Applied Economics) (undergraduate)  
 Econ 492A (Directed Reading Course: Auction Theory) (undergraduate)  
 Econ 492A (Directed Reading Course: Economics of Network) (undergraduate)  
 Econ 629 (Topics in Econometric Theory) (graduate)  
 Econ 626 (Econometric Theory I) (graduate)  
 Econ 592 (Reading Course: Econometric Methodologies in Social Economics) (graduate)  
 Econ 592 (Reading Course: Empirical Process Theory) (graduate)

## University of Pennsylvania

Econ 712 (Advanced Topics in Econometrics) (graduate)  
 Econ 705 (Fundamentals: Econometrics I) (graduate)  
 Econ 221 (Econometric Forecasting) (undergraduate)  
 Econ 220 (Introduction to Econometrics) (undergraduate)  
 Econ 103 (Introduction to Statistics) (undergraduate)

**Other Activities:**

## University of British Columbia

Graduate Admissions Committee (2011-2016)  
 Chairing Computer Committee (2015-2016)  
 Undergraduate Coordinator (2018-2021)  
 Program Committee: North American Summer Meeting (2019)  
 Program Committee: IAAE (2024)  
 Coorganizer of Canadian Econometrics Study Group Meeting (2021)

## University of Pennsylvania

Coorganizer of Econometrics Seminar (2007 Fall-2008 Spring)  
 Coorganizer of Econometrics Lunch for Faculty and Students (2007 Fall – 2008 Spring)  
 Coorganizer of Greater New York Metropolitan Econometrics Colloquium (December 2007)  
 Graduate Admissions Committee (2006-2008)  
 Premajor (Freshmen) Advisor (2007-2008)