

Curriculum Vitae

YIXIAO SUN

FEBURARY 2017

OFFICE ADDRESS

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University of California, San Diego
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CONTACT:

- Office phone: (858) 534-4692
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EMPLOYMENT:

- 2014 -- Professor, Department of Economics, University of California, San Diego.
- 2008--2014 Associate Professor, Department of Economics, University of California, San Diego.
- 2002--2008 Assistant Professor, Department of Economics, University of California, San Diego.

VISITING POSITIONS AND AFFILIATIONS:

- 2016--2021 Sir Clive W.J. Granger Endowed Chair in Econometrics.
- 2016--2019 Cheung Kong Guest Chair Professor Award, Ministry of Education of P.R. China (Wuhan University).
- June-July, 2016 Visiting Professor, School of Economics, Nankai University, China.
- September 2015 Visiting Professor, CIREQ, Montreal, Canada.
- 2013--2015 Visiting Professor, Economics and Management School, Wuhan University, China.
- 2013 Visiting Professor, School of Economics, Fudan University, China.

- 2007-- 2008 Visiting Professor, Cowles Foundation and Department of Economics, Yale University.

EDITORIAL BOARD:

Associate Editor, *Econometric Theory*, January 2009 -- present
 Associate Editor, *Journal of Econometrics*, 2016 -- present
 Editorial Board, *The Scientific World Journal*, 2013 -- 2016

EDUCATION:

- 1998--2002: Ph.D., Economics, Yale University,
 Advisors: Peter Phillips and Donald Andrews (co-chair)
- 1998--2000: M. Ph., Economics, Yale University
- 1993--1996: M.A., Management, Wuhan University, China
- 1994--1995: The Sino-US Graduate Economic Training Center, Sponsored by the
 Ford Foundation, Renmin University of China
- 1989--1993: B.S., Mathematics, Wuhan University, China

RESEARCH FIELD: Econometric Theory and Applied Econometrics

GRANTS, HONORS, AND AWARDS:

- National Science Foundation Grant (2009-2012). On smoothing parameter choice for interval estimation and hypothesis test in semiparametric models, Principal Investigator.
- National Science Foundation Grant (2015-2017). Should We Go One Step Further? An Accurate Comparison of One-step and Two-step Procedures in a Generalized Method of Moments Framework, Principal Investigator.
- Fellow, *Journal of Econometrics*, 2015.
- Econometric Theory Award. In Recognition of Research and Contributions, *multa scripsit*, to the Science of Econometrics, 2007.
- The Emerald Literati Outstanding Author Contribution Awards, *Advances in Econometrics*, 2014.
- Faculty Teaching Award, 2013-2014, Distinguished Teaching in a Graduate Core Course: Economics 220C. Department of Economics, UCSD.
- Faculty Teaching Award, 2011-2012, Distinguished Teaching in a Graduate Core Course: Economics 220C. Department of Economics, UCSD.

- Faculty Teaching Award, 2009-2010, Distinguished Teaching in a Graduate Advanced Elective Course: Economics 221. Department of Economics, UCSD.
- Faculty Teaching Award, 2006-2007, Distinguished Teaching in a Graduate Advanced Elective Course: Economics 227. Department of Economics, UCSD.

- Entry in ‘Who is Who in America,’ since the 2009 edition.
- Committee on Research Grant (UCSD), various years.
- Econometric Society World Congress Travel Grant, 2005.

- Dissertation Fellowship, Yale University, 2001-2002.
- John Perry Miller Fellowship, Yale University, 2000-2001.
- Carl Anderson Fellowship, Cowles Foundation for Research in Economics, 2000-2001.
- University Fellowship, Yale University, 1998-2000.
- Graduate Student Summer Fellowship, Cowles Foundation, 1999, 2000.

PUBLICATIONS:

Phillips, Peter C.B. and **Sun, Yixiao**. “Non-orthogonal Hilbert Projections in Trend Regression,” *Econometric Theory*, Vol. 17 (2001), No. 2.

Phillips, Peter C.B. and **Sun, Yixiao**. “Regression with an Evaporating Logarithm Trend,” *Econometric Theory*, Vol. 18 (2002), No. 3.

Sun, Yixiao and Phillips, Peter C.B. “Nonlinear Log-periodogram Regression Estimation of Long-Range Dependence for Perturbed Fractional Processes,” *Journal of Econometrics*, Vol. 115 (2003), No. 2, pp. 355-389.

Andrews, Donald W.K., and **Sun, Yixiao**. “Adaptive Local Polynomial Whittle Estimation of Long-range Dependence,” *Econometrica*, Vol. 72 (2004), No. 2, pp. 569-614.

Sun, Yixiao and Phillips, Peter C.B. “Understanding the Fisher Equation,” *Journal of Applied Econometrics*, Vol. 19(2004), pp. 869-886.

Sun, Yixiao. “A Convergent t-statistic in Spurious Regressions,” *Econometric Theory*, Vol. 20 (2004), pp. 943-962.

Sun, Yixiao. “Estimation of Long Run Average Relationship in Nonstationary Panel Time Series,” *Econometric Theory*, Vol. 20 (2004), pp. 1227-1260.

Phillips, Peter C.B., **Sun, Yixiao**, and Jin, Sainan. “Spectral Density Estimation and Robust Hypothesis Testing using Steep Origin Kernels without Truncation,” *International Economic Review*, Vol. 47 (2006), pp. 837-894.

Phillips, Peter C.B., **Sun, Yixiao**, and Jin, Sainan. “Long Run Variance Estimation and Robust Regression Testing Using Sharp Origin Kernels with No Truncation” *Journal of Statistical Planning and Inference*, Vol. 137 (2007), pp. 985-1023.

Sun, Yixiao. “Spurious Regressions Between Stationary Generalized Long Memory Processes,” *Economics Letters*, Vol. 90 (2006), pp. 446–454.

Guggenberger, Patrik and **Sun, Yixiao**. “Bias-Reduced Log-Periodogram and Whittle Estimation of the Long-Memory Parameter without Variance Inflation.” *Econometric Theory*, Vol. 22 (2006), pp. 863–912.

Jin, Sainan, Phillips, Peter C.B. and **Sun, Yixiao**. “A New Approach to Robust Inference in Cointegration,” *Economics Letters*, Vol. 91 (2006), pp. 300-306.

Carson, Richard and **Sun, Yixiao**. “The Tobit Model with a Non-zero Threshold,” *The Econometrics Journal*, (2007), 10, pp. 488–502.

Sun, Yixiao, Phillips, Peter C.B., and Jin, Sainan. “Optimal Bandwidth Selection in Heteroscedasticity-Autocorrelation Robust Testing,” *Econometrica*, Vol. 76(1), (2008), pp. 175–194.

Kim, Min Seong and **Sun, Yixiao**. “Spatial heteroskedasticity and autocorrelation consistent estimation of covariance matrix.” *Journal of Econometrics*, Vol. 160(2), 2011, pp. 349-371.

Cao, Bolong and **Sun, Yixiao**. “Asymptotic Distributions of Impulse Response Functions in Short Panel Vector Autoregressions.” *Journal of Econometrics*, Vol. 163(2), August 2011, pp. 127-143.

Sun, Yixiao. “Robust Trend Inference with Series Variance Estimator and Testing-optimal Smoothing Parameter,” *Journal of Econometrics*, Vol. 164(2), October 2011, pp. 345-366.

Sun, Yixiao, Phillips, Peter C.B. and Jin, Sainan, “Power Maximization and Size Control in Heteroscedasticity and Autocorrelation Robust Tests with Exponentiated Kernels,” *Econometric Theory*, Vol. 27(6), December 2011, pp. 1320-1368.

Sun, Yixiao and Kim, Min Seong: “Simple and Powerful GMM Over-identification Tests with Accurate Size,” *Journal of Econometrics*, Vol. 166(2), February 2012, pp. 267-281.

Sun, Yixiao: “Heteroscedasticity and Autocorrelation Robust F Test Using Orthonormal Series Variance Estimator,” *Econometrics Journal*, 16, 2013, pp. 1-26.

Kim, Min Seong and **Sun, Yixiao**. “Heteroskedasticity and Spatiotemporal Dependence Robust Inference for Linear Panel Models with Fixed Effects,” *Journal of Econometrics*, Vol. 177(1), November 2013, pp. 85-108.

Xiaohong Chen, Zhipeng Liao, and **Sun, Yixiao**: “Sieve Inference on Possibly Misspecified Semi-nonparametric Time Series Models,” *Journal of Econometrics*, Vol. 178(3), 2014, pp. 639-658.

Sun, Yixiao. “Let's Fix It: Fixed-b Asymptotics versus Small-b Asymptotics in Heteroscedasticity and Autocorrelation Robust Inference,” *Journal of Econometrics*, Vol. 178(3), 2014, pp. 659-677.

Sun, Yixiao. “Fixed-smoothing Asymptotics in a Two-step GMM Framework,” *Econometrica*. 82(6), 2014, 2327--2370.

Sun, Yixiao. Comment on “HAC Corrections for Strongly Autocorrelated Time Series” by Ulrich K. Müller, *Journal of Business & Economics Statistics*. 32(3), 2014, 330--334.

Sun, Yixiao. “Fixed-smoothing asymptotics in the presence of strong autocorrelation,” *Advances in Econometrics: Essays in Honor of Peter C.B. Phillips*, 33, 2014, 23--63.

Sun, Yixiao and Min Seong Kim: “Asymptotic F Test in GMM Framework with Cross Sectional Dependence,” *Review of Economics and Statistics*, 97(1), 2015, 210--223.

Huang, Meng, **Sun, Yixiao** and Hal White and “A Flexible Nonparametric Test for Conditional Independence,” *Econometric Theory*. 32(6), 2016, 1434-1482

Kim, Min Seong and **Sun, Yixiao**. “Bootstrap and k-step Bootstrap Bias Corrections for the Fixed Effects Estimator in Nonlinear Panel Data Models,” *Econometric Theory*, 32(6), 2016, 1523-1568

Kaplan, David and **Sun, Yixiao**. “Smoothed Estimating Equations for Instrumental Variables Quantile Regression,” Forthcoming, *Econometric Theory*.

Kim, Min Seong, **Sun, Yixiao** and Jingjing Yang. “A Fixed-bandwidth View of the Pre-asymptotic Inference for Kernel Smoothing with Time Series Data”, Forthcoming, *Journal of Econometrics*.

Hwang, Jungbin and **Sun, Yixiao**. “Asymptotic F and t Tests in an Efficient GMM Setting,” Forthcoming, *Journal of Econometrics*.

WORKING PAPERS:

Hwang, Jungbin and **Sun, Yixiao**. “Should We Go One Step Further? An Accurate Comparison of One-step and Two-step Procedures in a Generalized Method of Moments Framework.” 2016, “Revise and resubmit” requested. *Journal of Econometrics*.

Hwang, Jungbin and **Sun, Yixiao**. “Simple, Robust and Accurate F and t Tests in Cointegrated Systems” 2016, ‘revise and resubmit’ for *Econometric Theory*.

Sun, Yixiao and Kaplan, David. “A New Asymptotic Theory for Vector Autoregressive Long-run Variance Estimation and Autocorrelation Robust Testing.” 2011, ‘revise and resubmit’ for *Econometric Theory*.

Sun, Yixiao and Phillips, Peter C.B. “Optimal Bandwidth Choice for Interval Estimation in GMM Regression,” 2008, ‘revise and resubmit’ for *Econometrica*.

Sun, Yixiao. “Best Quadratic Unbiased Estimation of Realized Volatility in the Presence of Market Micro-structure Noises,” ‘revise and resubmit’ for *Journal of Econometrics*.

BOOK MANUSCRIPT/LECTURE NOTES

NONPARAMETRIC AND SEMIPARAMETRIC ECONOMETRICS: Available at www.econ.ucsd.edu/~yisun/lecture_note.pdf (282 pages)

CONFERENCE PRESENTATIONS AND INVITED SPEECHES

“Asymptotic F and t tests in an Efficient GMM Setting.” SUFE Econometric Conference, Summer 2016.

“A Fixed-bandwidth View of the Pre-asymptotic Inference for Kernel Smoothing with Time Series Data.” Econometric conference at Nankai University, Summer 2016.

“Should We Go One Step Further? An Accurate Comparison of One-step and Two-step Procedures in a Generalized Method of Moments Framework.” 2014 Shanghai Jiao Tong University and Singapore Management University Bi-party Conference, and 2014 Shandong econometric conference, and Econometric Society World Congress 2015.

“Fixed-smoothing Asymptotics in a Two-step GMM framework,” SUFE Econometrics Conference, summer 2014.

“Fixed-smoothing Asymptotics in a Two-step GMM framework,” Kansas Econometrics Conference. University of Kansas. April 2014.

“Fixed-smoothing Asymptotics and Asymptotic F and t Tests in the Presence of Strong Autocorrelation,” Advances in Econometrics Conference in Honor of Peter Phillips, Dallas TX, 2013.

“Asymptotic F Test in a GMM Framework with Cross Sectional Dependence.” Invited Speaker, the Joint Statistical Meetings, Montreal, 2013, Canada.

Discussant of two papers at Econometric Society Winter Meeting, San Diego, CA, January 2013.

“Asymptotic F Test in a Time Series GMM Framework.” Invited Speaker, Celebration Conference for the 30th Anniversary of Summer Palace Workshop on Econometrics, July 10-11, 2010, Chinese Academy of Social Sciences, Beijing.

“Let's Fix It: Fixed-b Asymptotics versus Small-b Asymptotics in Heteroscedasticity and Autocorrelation Robust Inference.” Presented at the World Congress of the Econometric Society, Shanghai, China, August 17-21, 2010.

“Spatial Heteroskedasticity and Autocorrelation Consistent Estimation of Covariance Matrix,” Invited speaker, May 21-22, 2009, University of Montreal.

“Spatial Heteroskedasticity and Autocorrelation Consistent Estimation of Covariance Matrix.” Invited speaker, Cowles Foundation Summer Conference, June 21-22, 2009, Yale University.

“Optimal Bandwidth Choice for Interval Estimation in GMM regression.” Invited Speaker, Cowles foundation conference: Looking into the future: A new generation of econometricians, June 11-12, 2007, Yale University.

“Best Quadratic Unbiased Estimators of Realized Volatility.” Invited Speaker, Conference on Volatility and High Frequency Data, April 21-22, 2007, University of Chicago.

“Best Quadratic Unbiased Estimators of Realized Volatility.” Presented at the Far Eastern Econometric Society Meeting, Beijing, 2006.

“Asymptotic Distributions of Impulse Response Functions in Short Panel Vector Autoregressions.” Presented at the Far Eastern Econometric Society Meeting, Beijing, 2006.

“A Theory of Optimal Heteroscedasticity-Autocorrelation Robust Inference.” Presented at Econometric Society World Congress, London, UK, August 18-24, 2005.

“Consistent HAC Estimation and Robust Regression Testing Using Sharp Origin Kernels with No Truncation.” Presented at Econometric Society Winter Meeting, San Diego, CA, January 3-5, 2004.

Discussant, Econometric Society Winter Meeting, San Diego, CA, January 3-5, 2004.

“Adaptive Local Polynomial Whittle Estimation of Long-range Dependence.” Presented at Econometric Society Summer Meeting, Evanston, IL, June 24-29, 2003. Session Chair.

“Local Polynomial Whittle Estimation of Long-range Dependence.” Presented at the Econometric Society Summer Meeting, College Park, Maryland, June 21-24, 2001.

Invited junior scholar at the National Science Foundation Symposium on Identification and Inference for Econometric Models, U.C. Berkeley, August 2-7, 2001.

TEACHING INTERESTS:

- Econometrics (all levels)
- Probability and Statistics (all levels)
- Financial Economics (all levels)
- Cross Sectional and Panel Data Econometrics (Graduate)
- Time Series Econometrics (Graduate)
- Computation (Graduate)

TEACHING EXPERIENCES:

Econ 220C: Panel Data Econometrics and Microeconometrics (Graduate, UCSD);
 Econ 221: Nonparametric and Semiparametric Econometrics (Graduate, UCSD);
 Econ 280: Computation (Graduate, UCSD);
 Econ 227: Nonparametric and Semiparametric Econometrics (Graduate, UCSD);

Econ120A: Econometrics (Undergraduate, UCSD);
 Econ120B: Econometrics (Undergraduate, UCSD);
 Econ 120C: Econometrics (Undergraduate, UCSD);
 AIP 197: Academic Internship Program (Undergraduate, UCSD);
 Econ 199: Independent Study (Undergraduate, UCSD);

Econ 162: Introduction to Probability and Statistics (Undergraduate, Yale);

TEACHING AWARDS:

- Distinguished Teaching Award in a Graduate Core Course, Department of Economics, UCSD, 2014
- Distinguished Teaching Award in a Graduate Core Course, Department of Economics, UCSD, 2012

- Distinguished Teaching Award in a Graduate Field Course, Department of Economics, UCSD, 2011
- Distinguished Teaching Award for Econ 221 (Advanced Field Course in Econometrics), Department of Economics, UCSD, 2007
- 98% approval rating for Econ120C (Undergraduate Econometrics), congratulatory letter from the Senior Vice Chancellor, UCSD, 2007

PH.D. STUDENT SUPERVISION:

- Bryan Kim, Thesis Committee Chair, Ph.D. Student in Economics, in progress.
- Qihui Chen, Thesis Committee Co-chair, Ph.D. Student in Economics, in progress.
- Zhenting Sun, Thesis Committee Co-chair, Ph.D. Student in Economics, in progress.

- Chen Liu, Thesis Committee Member, Ph.D. Student in Economics, in progress.
- Guangming Xu, Thesis Committee Member, Ph.D. Student in Economics, in progress.
- Michael Levy, Thesis Committee Member, Ph.D. Student in Economics, in progress.
- Roy Allen, Thesis Committee Member, Ph.D. Student in Economics, in progress.

- Tingyi Zhu, Thesis Committee Member, Ph.D. Student in Mathematics, in progress.

- Tatsuyoshi Okimoto, Thesis Committee Member, Ph.D. in Economics (2005).
- Bolong Cao, Thesis Committee Member, Ph.D. in Economics (2006).
- Cory Koedel, Thesis Committee Member, Ph.D. in Economics (2007).
- Grayson Calhoun, Thesis Committee Member, Ph.D. in Economics (2009).
- Meng Huang, Thesis Committee Member, Ph.D. in Economics (2009).
- Xun Lu, Thesis Committee Member, Ph.D. in Economics (2010).
- Suyong Song, Thesis Committee Member, Ph.D. in Economics (2010).
- Benjamin Fissel, Thesis Committee Member, Ph.D. in Economics (2011).
- Dalia Ghanem, Thesis Committee Member, Ph.D. in Economics (2013).
- Jong-Myun Moon, Thesis Committee Member, Ph.D. in Economics (2014).
- Juwon Seo, Thesis Committee Member, Ph.D. in Economics (2015).
- Matthew Goldman, Thesis Committee Member, Ph.D. in Economics (2015).

- Min Seong Kim, Thesis Committee Chair, Ph.D. in Economics (2011).
- David Kaplan, Thesis Committee Chair, Ph.D. in Economics (2013).
- Jungbin Hwang, Thesis Committee Chair, Ph.D. in Economics (2016).

- Kristin Jehring, Thesis Committee Member, Ph.D. in Mathematics (2009).
- Liang Wang, Thesis Committee Member, Ph.D. in Mathematics (2015).
- Adeline Lo, Thesis Committee Member, Ph.D. in Political Science (2016).

SEMINAR PRESENTATIONS:

US universities such as

Boston University,
 Brown University,
 Cornell University,
 Duke/NCSU/ UNC,
 Emory University,
 Harvard/MIT,
 Iowa State University,
 LSU,
 Michigan State University,
 New York University,
 Ohio State University
 Princeton University,
 Penn State University
 Rice University,
 Syracuse University,
 SUNY Albany
 Texas A&M University,
 UC Berkeley,
 UC Riverside,
 UC Davis,
 UC Los Angeles,
 UC San Diego (Economics & Mathematics),
 University of Chicago (Economics & Graduate School of Business),
 University of Iowa,
 University of Kansas,
 University of Maryland,
 University of Michigan,
 University of Pennsylvania,
 University of Rochester,
 University of Texas at Austin,
 University of Southern California,
 University of Washington, Seattle
 University of Wisconsin, Milwaukee
 University of Wisconsin, Madison,
 Vanderbilt University
 Yale University.

I visited many of the above departments multiple times.

International universities such as

Fudan University, China
 Hong Kong University of Science and Technology
 Huazhong University of Science and Technology, China
 National University of Singapore

Shanghai Jiaotong University, China
Shanghai University of Finance and Economics, China
Seoul National University
Shandong University, China
Singapore Management University
University of Montreal
University of Toronto
Wuhan University, China

PROFESSIONAL AFFILIATIONS: The Econometric Society, American Statistics Association, Institute of Mathematical Statistics.

REFEREE FOR STATISTICAL JOURNALS:

Annals of Statistics,
Bernoulli,
Computational Statistics,
Computational Statistics and Data Analysis,
Finance and Stochastics,
PLOS ONE,
Journal of Applied Statistics,
Journal of Multivariate Analysis,
Journal of the Japan Statistical Society,
Journal of Time Series Analysis,
Journal of Statistical Planning and Inference,
Metrika,
The Scientific World Journal.

REFEREE FOR ECONOMICS JOURNALS:

Econometrica,
Econometrics,
Economics Bulletin,
Econometric Journal,
Econometric Reviews,
Econometric Theory,
Finance and Stochastics,
Journal of Applied Econometrics,
Journal of Business and Economic Statistics,
Journal of Econometrics,
Journal of Economic Survey,
Journal of Financial Econometrics,
Journal of Time Series Econometrics,

Oxford Bulletin of Economics and Statistics,
 Quantitative Economics,
 Quantitative Finance,
 Macroeconomic Dynamics,
 Review of Economics and Statistics,
 Studies in Nonlinear Dynamics and Econometrics.

REVIEWERS FOR

National Science Foundation, USA;
 National Research Council, Canada;
 Risk Management Institute: National University of Singapore.

RECENT CONFERENCE ORGANIZATION

Chair of local program committees, China Meeting of the Econometric Society to be held in 2017

Co-organizer, International conference on “Frontiers of Theoretical Econometrics,” University of Konstanz, Germany, 2015.

Program Committee, SETA 2015, the 11th International Symposium on Econometric Theory and Applications, Hitotsubashi University.

Program Committee, SETA 2014, the 10th International Symposium on Econometric Theory and Applications, National Taiwan University.

Program Committee, International work-conference on Time Series (ITISE 2016), Granada, Spain.

Program Committee, International work-conference on Time Series (ITISE 2015), Granada, Spain.

Program Committee, International work-conference on Time Series (ITISE 2014), Granada, Spain.

RECENT DEPARTMENT AND UNIVERSITY SERVICES

Graduate Committee, Department of Economics, UCSD (2016-

General Campus Research Grant Committee (2015-2017)

Representative, Representative Assembly, UCSD (2014-2016)

Social Sciences Computing Committee (2016 -

Department computing director (2003-2005)

Chair and Member, Department Econometrics Qualification Exam Committee (various years)

Informal Department Computing Liaison (2005-2016)

Member, Department graduate admissions committee (2009-2010)

Chair, Department graduate admissions committee (2010-2011, 2011-2012, 2012-2013)