CHUNRONG AI

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https://scholar.google.com/citations?user=oQD_QIcAAAAJ&hl=en&oi=ao

EDUCATION

September 1990, Ph.D. in Economics, Massachusetts Institute of Technology, USA

June 1985, M.S. in Mathematics, Huazhong University of Science and Technology, China

June 1982, B.S. in Mathematics, Huazhong University of Science and Technology, China

PROFESSIONAL EXPERIENCE

July 2020 - Professor of Economics, School of Management and Economics
Presidential Chair Professor
The Chinese University of Hong Kong, Shenzhen

October 2022 - Associate Director, Shenzhen Finance Institute
July 2021 – October 2022 Associate Director, Shenzhen Institute of Data Economy
July 2020 - Director, Social and Behavioral Big Data Lab
Shenzhen Research Institute of Big Data

August 2006 – June 2020 Professor of Economics
Florida Term Professor (August 2017 – June 2020)
Robin and Jean Gibson Term Professor (August 2016 – August 2017)
The University of Florida

August 1998 – August 2006 Associate Professor of Economics, University of Florida

June 2001 – June 2002 Visiting Associate Professor, Hong Kong University of Science and Technology

August 1994 - August 1998 Assistant Professor of Economics, University of Florida

September 1991 - June 1994 Assistant Professor of Economics, SUNY - Stony Brook

July 1990 - July 1991 Research Fellow, National Bureau of Economic Research, Inc

AWARD AND HONOR

September 2021 Elected Fellow to Econometric Society

RESEARCH INTEREST

Cross-sectional econometrics; Applied microeconomics; Chinese economy; Big data

PUBLICATION

Refereed Journal Articles

1. Feng Liu, Jie Xu, Chunrong Ai (2023). Heterogeneous Impacts of Oil Prices on China's Stock Market: Based on a New Decomposition Method. *Energy*. https://doi.org/10.1016/j.energy.2023.126644

2. Yuanqing Zhang, Chunrong Ai, Yagin Feng (2023). Threshold Effect in Varying Coefficient Models with Unknown Heteroskedasticity. *Computational Statistics* https://doi.org/10.1007/s00180-023-01335-7

3. Yang Yang, Graziano Abrate and Chunrong Ai (2023). Econometric Analysis in Hospitality and Tourism Management. Chapter 4 in *Cutting Edge Research Methods in Hospitality and Tourism*, pp. 53-69. Emerald Publishing Limited. doi:10.1108/978-1-80455-063-220231005

4. Yingyi Chen; Shell Xu Hu; XI Shen; Chunrong Ai; Johan A.K. Suykens (2022). Compressing Features for Learning with Noisy Labels. *IEEE Transactions on Neural Networks and Learning Systems*. Doi: 10.1109/TNNLS.2022.3186930

5. Chunrong Ai, Li-Hsien Sun, Zheng Zhang, and Liping Zhu (2022). Testing Unconditional and Conditional Independence via Mutual Information. *Journal of Econometrics*. https://doi.org/10.1016/j.jeconom.2022.07.011

6. Chunrong Ai, Oliver Linton, Zheng Zhang (2022). Estimation and Inference for the Counterfactual Distribution and Quantile Functions in Continuous Treatment Models. *Journal of Econometrics* 228(1), 39-61.

7. Chunrong Ai, Lukang Huang, Zheng Zhang (2022). A Simple and Efficient Estimation of Average Treatment Effects in Models with Unmeasured Confounders. *Statistica Sinica* 32:1-20.

8. Chunrong Ai, Oliver Linton, Kaiji Motegi, Zheng Zhang (2021). A Unified Framework for Efficient Estimation of General Treatment Models. *Quantitative Economics* 12:779-816

9. Chunrong Ai, Lukang Huang, Zheng Zhang (2020). A Mann-Whitney test of distributional effects in a multivalued treatment. *Journal of Statistical Planning and Inference* 209:85-100.

10. Shi Yafeng, Ying Tingting, Yanlong Shi, Ai Chunrong (2020). A comparison of conditional predictive ability of implied volatility and realized measures in forecasting volatility. *Journal of Forecasting* 39:1025-1034.

11. Chunrong Ai, Oliver Linton, and Zheng Zhang (2020). A Simple and Efficient Estimation Method for Models with Nonignorable Missing Data. *Statistica Sinica* 30:1949-1970

12. Chunrong Ai, Yuanqing Zhang (2017). Estimation of Partially Specified Spatial Panel Data Models with Fixed-Effects. *Econometric Reviews*, 36:6-22

13. Chunrong Ai, Hongjun Li, Zhongjian Lin, Meixia Meng (2015). Estimation of Panel Data Partly Specified Tobit Regression with Fixed Effects. *Journal of Econometrics*， 188:316-326.

14. Chunrong Ai, Meixia Meng (2015). Endogeneity in Semiparametric Panel Binary Choice Model. *Econometric Reviews*, 34:798-826.

15. Chunrong Ai, Jinhong You, Yong Zhou (2014). Estimation of Fixed Effects Panel Data Partially Linear Additive Regression Models. *Econometrics Journal* 17, 83-106.

16. Meixia Meng, Chunrong Ai (2013). Some Uniform Convergence Results for Kernel Estimators. *Science China* 56:1945-1956.

17. Chunrong Ai, Qiong Zhou (2012). Estimation of Censored Regression Model: A Simulation Study. *Frontiers of Economics in China* 7, 499-518.

18. Chunrong Ai, Meixia Meng (2012). A Root-N Consistent Estimator for Some Fixed-effects Panel Data Sample Selection Models. *Economics Letters*, 116(3), 411-413.

19. Chunrong Ai, Xiaohong Chen (2012). The Semiparametric Efficiency Bound for Models of Sequential Moment Restrictions Containing Unknown Functions. *Journal of Econometrics*, 170(2), 442-457

20. Chunrong Ai, Meixia Meng (2011). A Locally Linear Estimation of Regression Discontinuity. *Frontiers of Economics in China* 6, 495-506.

21. Chunrong Ai, Jinhong You, Yong Zhou (2011). Statistical Inference Using a Weighted Difference-Based Series Approach for Partially Linear Regression Models. *Journal of Multivariate Analysis* 102(3), 601 – 618.

22. Chunrong Ai, Li Gan (2010). An Alternative Root-N Consistent Estimator for Panel Binary Choice Model. *Journal of Econometrics* 157(1), 93-100.

23. Chunrong Ai, Edward Norton (2008). A Semiparametric Derivative Estimator in Log Transformation Models. *Econometrics* Journal 11(3), 538-553.

24. Chunrong Ai (2007). Semiparametric Maximum Likelihood Estimation of Conditional Moment Restrictions Models. *International Economic Review* 48(4), 1093 - 1118.

25. Chunrong Ai, Xiaohong Chen (2007). Estimation of Possibly Misspecified Semiparametric Conditional Moment Restriction Models with Different Conditioning Variables. *Journal of Econometrics* 141, 5 – 43.

26. Chunrong Ai, Arjun Chatrath, Frank Song (2007). A Semiparametric Estimation of Optimal Hedge Ratio. *Quarterly Review of Economics and Finance* 47, 366 – 381.

27. J.L. Arcand, F. Ethier, Chunrong Ai (2007). Moral Hazard and Marshallian Inefficiency: Evidence from Tunisia. *Journal of Development Economics* 83(2), 411-445.

28. Chunrong Ai, Arjun Chatrath, Frank Song (2006). On the Comovement of Commodity Prices. The *American Journal of Agricultural Economics,* 88(3), 574 – 588.

29. Chunrong Ai, Mei Wen (2005). Ownership and Sector performance in Present-day China: A Regional Study. *Pacific Economic Review* 10(4), 471 – 484.

30. Chunrong Ai, David Sappington (2004). Incentive Regulation and Telecommunication Service Quality. *Journal of Regulatory Economics* 26, 263 – 286.

31. Chunrong Ai, David Sappington (2005). Reviewing the Impact of Incentive Regulation on U.S. Telephone Service Quality. *Utility Policy* 13, 201 – 210.

32. Chunrong Ai, Edward Norton, Hua Wang (2004). Computing interaction effects and standard errors in logit and probit models. *The Stata Journal* 4, 154 – 167.

33. Chunrong Ai, Xiaohong Chen (2003). Efficient Estimation of Models with Conditional Moment Restrictions Containing Unknown Functions. *Econometrica* 71, 1795-1843.

34. Chunrong Ai, Edward Norton (2003). The Interaction Terms in Logit and Probit Models. *Economic Letters*, 80, 123-129.

35. Chunrong Ai, David Sappington (2002). The Impact of the State Incentive Regulations on the U.S. Telecommunication Industry. *Journal of Regulatory Economics* 22, 133-160.

36. Chunrong Ai (2001). Consistent Specification Tests for Regression Models. *Annals of Economics and Finance*, 2, 31-58.

37. Chunrong Ai (2001). A Modified Average Derivatives Estimator. *Econometric Reviews*, 20(1), 113-131.

38. Chunrong Ai, Edward Norton (2000). Standard Errors of Log-transformation Models with Heteroscedasticity. *Journal of Health Economics*, 19, 697-718.

39. Chunrong Ai, JL Arcand (1998). Moral Hazard and Marshallian Inefficiency: Evidence from Tunisia. *L'actualite Economique*, 74 (3), 315-342.

40. Chunrong Ai (1997). On Public Capital Analysis with State Data", *Economics Letters*, 57, 209-212

41. Chunrong Ai (1997). An Improved Estimator for Models With Randomly Missing Data", *Journal of Nonparametric Statistics*, 7, 331-347.

42. Chunrong Ai (1997). A Semiparametric Maximum Likelihood Estimator. *Econometrica*, 65(4), 933-963.

43. Chunrong Ai, Daniel McFadden (1997). Estimation of Some Partially Specified Nonlinear Models. *Journal of Econometrics*, 76, 1-37.

44. Chunrong Ai, Steve Cassou (1996). Equivalence of the Standard and the Modified Switching Regression Models. The *Review of Economics and Statistics*, 78, 365-366.

45. Chunrong Ai, Steve Cassou (1995). A Normative Analysis of Public Capital. *Applied Economics*, 27, 1201-1209.

46. Chunrong Ai (1995). A Positive Semi-Definite Covariance Matrix for Hausman Specification Tests of Conditional and Marginal Densities. *Oxford Bulletin of Economics and Statistics*, 57(2), 277-281.

47. Chunrong Ai (1994). A Semiparametric Efficiency Bound of A Disequilibrium Model without Observed Regime. *Journal of Econometrics*, 62, 143-163.

48. Chunrong Ai, Steve Cassou (1993). A Diagnostic Test without Numerical Integration. *Economics Letters*, 42, 129-132; Erratum: 46, 1994, 181-182.

49. Chunrong Ai, Chaoying Chen (1992). Estimation of Fixed Effects Bivariate Censored Regression Models. *Economics Letters*, 40, 403-406.

Book and Book Chapters

"The Dynamics of Housing Demand by the Elderly: User Cost Effects" (with J. Feinstein, D. McFadden, and H. Polakowski), in *Issues in the Economics of Aging*, edited by David Wise, University Chicago Press, 1990

"Recent Developments in Micro-econometrics" (with Yaoping Zhang), in *Frontiers in Modern Economics and Finance*, edited by Guoqiang Tian, Commerce Publisher, Beijing, China, 2002.

“Econometrics: Semiparametric Methods” (with Xiaohong Chen), *Advances in Economics and Finance*, edited by Hengfu Zou, Beijing University Press, 2000

Essentials of Microeconometrics (in Chinese), coedited with Shao-kung Lin and Qiming Tang, Huazhong University of Science and Technology Press, 2003

“Semiparametric and Nonparametric Methods in Panel Data Models” (with Qi Li), in Advanced Studies in Theoretical and Applied Econometrics: *The Econometrics of Panel Data*, edited by László Mátyás and Patrick Sevestre, pp.451 – 478, Springer 2008.

GRANTS

2010 – 2012, National Natural Science Foundation Grant, awarded by National Natural Science Foundation of China for studying Spatial Semiparametric Panel Regression Models (70971082), 280,000 RMB

2012 – 2014, A Spatial-Temporal Econometric Model to Estimate Costs and Benefits of Sea-Level Rise Adaptation Strategies, funded by Florida Sea Grant, US $100000.

20014 – 2017, Modeling Cross-Sectional Dependency: Theory and Application, funded by National Natural Science Foundation of China (71371118), 570000 RMB.

2015 – 2018, Complex Data and Financial Risk, funded by the National Natural Science Foundation of China (71331006), 2400000 RMB.

2019 – 2022, Estimation and Inference of the Treatment Effect with Cross Sectionally Dependent Data: Theory and Application, funded by the National Natural Science Foundation of China (71873138), 490000 RMB

2022 – 2026, Machine Learning in High Dimension Econometrics and Applications in Economics (72133005), 2000002 RMB

2023 – 2026， Machine Learning Mechanism Design, 1000000 RMB

SERVICE

Professional Referee Service

Econometrica, 1995 – present; occasional reviewer

Review of Economics Studies, 2006 – present; occasional reviewer

Econometric Theory, 1995 – present; occasional reviewer

Journal of Econometrics, 1993 – present; about three papers per year

Journal of Economics and Business Statistics, 1993 – present; about one paper per year

Econometric Reviews, 1997 – present; occasional reviewer

Journal of Nonparametric Statistics, 1997 – present; about three papers in total

Journal of Regulatory Economics, 2003 – present; occasional reviewer

Journal of Industrial Economics; one paper

International Journal of Applied Economics, 2005 - present; occasional reviewer

Health Economics, 2005 – present; occasional reviewer

Oxford Bulletin of Economics and Statistics, occasional reviewer

Journal of Economics and Management Strategy, occasional reviewer

Journal of American Agricultural Economics, 2005 – present; occasional reviewer

Economic Journal, 2005 – present; occasional reviewer

National Science Foundation, 1993 – present; 30 review requests per year

China Economic Review, 2005 – present; a total of four papers.

Editorial Service

2011 – present, *International Studies of Economics (formerly Frontiers of Economics in China)*, Coeditor

2011 – present, *Econometrics Journal*, Associate Editor

2005 – present, *Annals of Economics and Finance*, Associate Editor