YINCHU ZHU

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Academic Appointment

2020-present   BRANDEIS UNIVERSITY
Assistant Professor of Economics

2017-2020   LUNDQUIST COLLEGE OF BUSINESS, UNIVERSITY OF OREGON
Assistant Professor of Operations and Business Analytics

Education

2017   RADY SCHOOL OF MANAGEMENT, UNIVERSITY OF CALIFORNIA, SAN DIEGO
Ph.D in Management (Finance)

2014   UNIVERSITY OF CALIFORNIA, SAN DIEGO
M.A in Mathematics (Applied)

2011   BOCCONI UNIVERSITY, ITALY
M.S in Finance cum laude

2009   ZHONGNAN UNIVERSITY OF ECONOMICS AND LAW, CHINA
B.A in Management (Accounting)

Published/Accepted Papers

- Statistical Inference For Noisy Matrix Completion Incorporating Auxiliary Information with Shujie Ma, Po-Yao Niu and Yichong Zhang. Accepted by ***Journal of the American Statistical Association***.

- Optimal data-driven hiring with equity for underrepresented groups with Ilya Ryzhov. Accepted by ***Production and Operations Management***.

- Comparing forecasting performance with panel data with Rioting Qu and Allan Timmermann. Accepted by ***International Journal of Forecasting***.

- Inference for low-rank models with Victor Chernozhukov, Christian Hansen and Yuan Liao. ***Annals of Statistics***, *51(3):1309–1330, 2023*.

- [Compare Forecasting Performance in Cross-Sections](#) with Ritong Qu and Allan Timmermann. Comparing forecasting performance in cross-sections. *Journal of Econometrics*, *237(2):105186, 2023*.

- Towards personalized inference on individual treatment effects with Victor Chernozhukov, Kaspar Wüthrich. *Proceedings of the National Academy of Sciences*, *120(7), 2023.*

- [Conditional Rotation Between Forecasting Models](#) with Allan Timmermann. *Journal of Econometrics*, *231(2):329–347, 2022*. **Lead article**

- [Gains From Switching Between Forecasts](#) with Allan Timmermann. *Advances in Econometrics*, *volume 43A, pages 99-116, 2022*

- [Testability of high-dimensional linear models with non-sparse structures](#) with Jelena Bradic and Jianqing Fan. *Annals of Statistics*, *50(2):615–639, 2022.*

- [Distributional conformal prediction](#) with Victor Chernozhukov and Kaspar Wüthrich. *Proceedings of the National Academy of Sciences*, *118(48), 2021.*

- [An Exact and Robust Conformal Inference Method for Counterfactual and Synthetic Controls](#) with Victor Chernozhukov and Kaspar Wüthrich. *Journal of the American Statistical Association*, *116(536):1849–1864, 2021.*

- [Comments on Leo Breiman's paper: "Statistical Modeling: The Two Cultures" (Statistical Science, 2001, 16(3), 199-231).](#) with Jelena Bradic. *Observational Studies*, *7(1): 21–31, 2021*

- [Small Sample Properties of Likelihood Ratio Tests in Linear State Space Models: An Application to DSGE Model Validation](#) with Ivana Komunjer. *Journal of Econometrics*, *218(2):561–586, 2020*

- [Variable Selection in Panel Models with Breaks](#) with Simon Smith and Allan Timmermann. *Journal of Econometrics*, *212(1), 323 – 344, 2019*

- [Significance testing in non-sparse high-dimensional linear models](#) with Jelena Bradic. *Electronic Journal of Statistics*, *12(2), 3312–3364, 2018*

- [Exact and Robust Conformal Inference Methods for Predictive Machine Learning With Dependent Data](#) with Victor Chernozhukov and Kaspar Wüthrich. *in Proceedings of the 31st **Conference On Learning Theory (COLT)**, ed. by S. Bubeck, V. Perchet, and P. Rigollet, vol. 75 of Proceedings of Machine Learning Research, pp. 732–749. PMLR. (2018)*

- [Linear hypothesis testing in dense high-dimensional linear models](#) with Jelena Bradic. *Journal of the American Statistical Association*, *113(524), 1583–1600, 2018*

- [Comments on 'High-dimensional simultaneous inference with the bootstrap by Dezeure, Buhlmann and Zhang'](#) with Jelena Bradic. ***TEST**: An Official Journal of the Spanish Society of Statistics and Operations Research, 26(4), 720–728, 2017*

Working Papers (in progress)

- [Minimax semiparametric learning with approximate sparsity](#) with Jelena Bradic, Victor Chernozhukov and Whitney Newey.

- [Semidiscrete optimal transport with unknown costs](#) with Ilya Ryzhov.

- [A t-test for synthetic controls](#) with Victor Chernozhukov and Kaspar Wüthrich.

- [New possibilities in identification of binary choice models with fixed effects](#)

- [Phase Transition of the Monotonicity Assumption in Learning Local Average Treatment Effects](#)

- [Breaking the curse of dimensionality in regression](#) with Jelena Bradic.

- [A simple method for uniform subvector inference of linear instrumental variables models](#).

- [Can Two Forecasts Have the Same Conditional Expected Accuracy?](#) with Allan Timmermann

- [Do any economists have superior forecasting skills?](#) with Ritong Qu and Allan Timmermann

- [How well can we learn large factor models without assuming strong factors?](#)

- [Learning non-smooth models: instrumental variable quantile regressions and related problems](#).

- Be Gentle to the Newbies: Heterogeneous Impacts of Negative Feedback in Online Communities with Wei Chen, Laura Brandimarte, and Dong Jing.

- [Sparsity Double Robust Inference of Average Treatment Effects](#) with Jelena Bradic and Stefan Wager.

- [High-dimensional panel data with time heterogeneity: estimation and inference](#)

- [Testing for common factors in large factor models](#)

- [Two-sample testing in non-sparse high-dimensional linear models](#) with Jelena Bradic.

- [A projection pursuit framework for testing general high-dimensional hypothesis](#) with Jelena Bradic.

- [Quantile spacings: a simple method for the joint estimation of multiple quantiles without crossing](#) with Lawrence Schmidt.

- "Inference on manifolds", with Ivana Komunjer.

- "Limit theory of filtered historical simulation in GARCH models", with Brendan Beare and Lajos Horvath.

Conference and Seminar Presentations

2025   Panelist for Virtual Time Series Seminar

2024   London School of Economics and Political Science

2023   Conference Econometrics in the Era of Machine Learning at U Chicago, Chinese University of Hong Kong, UC Riverside, Optimization-Conscious Econometrics Conference II at U Chicago, Paris School of Economics, Brown U, Georgetown U, Southern Economic Association Annual Meeting, Econometric Society European Winter Meeting

2022   Virginia Commonwealth U, ENAR 2022, Mini-Conference at U of Rochester, NBER/NSF CEME Conference for Young Econometricians, MIT/Harvard econometrics workshop, Emory U, Southern Economic Association Annual Meeting, Green line Econometrics Conference

2021   U Michigan, Durham U, MIT metrics lunch, U of Glasgow, BU-BC Joint Workshop in Econometrics

2020   Brandeis U, U of Southern California, Stanford U, Tsinghua U

2019   Statistics & Data Science Symposium: Beyond Big, Missing or Corrupted Data (UCSD), Conference on Synthetic Controls and Related Methods, North American Summer Meeting of Econometric Society, INFORMS, California Econometrics Conference, MIT/Harvard joint seminar, U Connecticut (short lectures on machine learning)

2018   Penn State U, Machine Learning in Economics and Econometrics (Munich, Germany), Workshop Machine Learning and Causal Inference (Erasmus U Rotterdam), Conference of the International Society for Nonparametric Statistics, New Frontiers in Econometrics (U Connecticut), EcoSta 2018 Hong Kong, ICSA 2018 China, Joint Statistical Meeting 2018, INFORMS, Princeton ORFE, U Connecticut

2017   Fed New York, U Maryland, UNC Chapel Hill, U Oregon, U Sydney, UNSW, U Western Ontario, SoFiE Conference, Conference on Computing in Economics and Finance, Financial Econometrics Summer School

2016   26th Annual Meeting of the Midwest Econometrics Group, California Econometrics
        Conference, UCSD Econometrics Seminar, North American Summer Meeting (2016)
        of the Econometric Society

2015   European Winter Meeting (2015) of the Econometric Society, California
        Econometrics Conference, 35th International Symposium on Forecasting (2015)

2014   Financial Econometrics Summer School

Teaching Experience

I have worked as the teaching assistant for the following courses at UCSD.
- Advanced Cost Accounting (Prof. Joe Pecore)
- Federal Taxation-Companies (Prof. John Anderson)
- Topics in Finance: Money and Banking (Prof. Sat Parashar)
- Topics in Finance: Chinese Financial Markets (Prof. Jun Liu)
- Portfolio Theory in Practice (Prof. Harry Markowitz)
- Financial Accounting (Prof. Hans Christensen)

I teach (or have taught) the following courses at University of Oregon
- Business Statistics
- Information Analysis for Managerial Decisions
- Business Analytics II
- Analyzing Big Data

I teach the following courses at Brandeis University
- Econometrics

Honors and Awards

2023   Bernstein Faculty Fellow at Brandeis University

2017   New Junior Faculty Research Award at University of Oregon

2012-2016   Rady Fellowship at UCSD and Dean Summer Research fellowship

2009-2011   Graduate Merit Award at Bocconi University

Professional Activities and Other Information

Association Editor: Journal of Business & Economic Statistics (2022-2027), The Econometrics
Journal (2024-2027)

Journal referee: American Economic Review, American Economic Review: Insights, Annals of Statistics, Biometrika, Econometrica, Econometrics Journal, Econometric Theory, Electronic Journal of Statistics, Journal of Applied Econometrics, Journal of the American Statistical Association, Journal of Business & Economic Statistics, Journal of Econometrics, Journal of Financial Econometrics, Journal of Machine Learning Research, Journal of Multivariate Analysis, Journal of the Royal Statistical Society Series B, Journal of Statistical Planning and Inference, Operations Research, Quantitative Economics, International Journal of Forecasting, Journal of Empirical Finance (outstanding reviewer award), Review of Asset Pricing Studies, Transactions on Signal and Information Processing over Networks

Professional affiliations: American Economic Association, Econometric Society, American Statistical Association, Institute for Operations Research and the Management Sciences (INFORMS)

Research assistant: Winter and Spring 2013 for Prof. Patrik Guggenberger

Language: Mandarin Chinese (Native), English (Fluent)

Programming: MATLAB, R, Python, Stata, SAS

Citizenship: China and Permanent Resident of the United States

Last updated: April 2, 2025