

Yiqi Liu

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RESEARCH INTERESTS	Econometrics, causal inference, machine learning, nonparametric methods	
EDUCATION	Cornell University , Ithaca, NY Ph.D. in Economics	Expected 2026 (third-year)
	Tulane University , New Orleans, LA B.S. in Mathematics and Economics with minor in Studio Art, <i>summa cum laude</i>	2020
WORKING PAPERS	Using Forests in Multivariate Regression Discontinuity Designs (with Yuan Qi) [draft] <p>We discuss estimating conditional treatment effects in regression discontinuity designs with multiple scores. While local linear regressions have been popular in settings where the treatment status is completely described by one running variable, they do not generalize easily to empirical applications involving multiple treatment assignment rules. In practice, the multivariate problem is usually reduced to a univariate one where using local linear regressions is suitable. Instead, we propose a forest-based estimator that can flexibly model multivariate scores, where we build two honest forests in the sense of Wager and Athey (2018) on both sides of the treatment boundary. This estimator is asymptotically normal and sidesteps the pitfalls of running local linear regressions in higher dimensions. In simulations, we find our proposed estimator outperforms local linear regressions in multivariate designs and is competitive against the minimax-optimal estimator of Imbens and Wager (2019). The implementation of this estimator is simple, can easily accommodate any (fixed) number of running variables, and does not require estimating any nuisance parameters of the data generating process.</p>	
WORK IN PROGRESS	Synthetic Parallel Trends A Measure of Model Fit (with Levon Barseghyan and Francesca Molinari)	
RESEARCH & TEACHING EXPERIENCE	Research Assistant for Levon Barseghyan and Francesca Molinari Research Assistant for Francesca Molinari Teaching Assistant for Douglas McKee (Applied Econometrics, undergraduate) Teaching Assistant for Suraj Malladi (Mathematical Economics, Ph.D. core)	Fall 2022, Spring 2023 Summer 2022 Spring 2022 Fall 2021
PROFESSIONAL ACTIVITIES	Student Organizer, Cornell Econometrics Reading Group	2022-2023
REFeree SERVICE	<i>Review of Economic Studies</i>	
FELLOWSHIPS & AWARDS	Outstanding Teaching Award, Cornell University Sage Fellowship, Cornell University Research Award in Economics, Tulane University Phi Beta Kappa, Tulane University Presidential Scholarship Award, Tulane University	2022 2020-2025 2020 2020 2016-2020
ADVISING COMMITTEE	Prof. Francesca Molinari (Chair) Department of Economics Cornell University fm72@cornell.edu	Prof. José Luis Montiel Olea Department of Economics Cornell University jlo67@cornell.edu