

Jakob R. Juergens

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Education

Ph.D.	Economics	UNIVERSITY OF WISCONSIN – MADISON	2022 – Present
M.Sc.	Economics	UNIVERSITY OF WISCONSIN – MADISON	2022 – 2024
M.Sc.	Economics	UNIVERSITY OF BONN	2020 – 2022
B.Sc.	Economics	UNIVERSITY OF BONN	2017 – 2020

Working Papers

Jackknife Variance Estimation for Hájek-Dominated Generalized U-Statistics [arXiv:2509.12356](#) 

This paper proves ratio-consistency of the jackknife variance estimator for a broad class of Hájek-dominated generalized U-statistics, including the classical fixed-order case. It also delivers weaker sufficient conditions for consistent variance estimation in two-scale distributional nearest-neighbor regression.

Robust Inference for Conditional Z-Estimation via Distributional Nearest Neighbors

This paper develops a localized distributional nearest-neighbor framework for pointwise inference on conditional moment targets, including heterogeneous treatment effects and conditional quantile slopes. It combines orthogonal scores with leave-one-out stability in place of cross-fitting and yields feasible inference using a jackknife variance estimator and a localized finite-difference Jacobian.

Research Experience

Research Assistant UNIVERSITY OF WISCONSIN – MADISON Sep 2024 – May 2026

- Implemented Julia methods and simulations for Jack R. Porter’s work on asymptotic theory for batched bandits

Project Assistant UNIVERSITY OF WISCONSIN – MADISON Jun 2023 – Aug 2023

- Implemented Julia methods and simulations for Jack R. Porter’s work on batched bandits and conducted literature research on weak-IV inference

Research Assistant UNIVERSITY OF BONN Nov 2020 – Jun 2022

- Research assistant for Joachim Freyberger and Lena Janys; developed simulation code in R and C++ for large-scale runs on supercomputing clusters
- Developed materials for Joachim Freyberger’s Ph.D. Econometrics course

Intern GERMAN COUNCIL OF ECONOMIC EXPERTS Aug 2020 – Oct 2020

- Supported the Business Cycle Analysis and Monetary Policy teams on GDP forecasting with mixed-frequency data and publication lags

Student Assistant UNIVERSITY OF BONN Apr 2018 – Jun 2020

- Scientific and administrative assistant of Jürgen von Hagen

Teaching Experience

- Teaching Assistant** **Introductory Econometrics** Spring 2024
- Held discussion sections and office hours for Christopher McKelvey; focused on estimation, empirical examples, and Stata
- Teaching Assistant** **Mathematical Economics (Ph.D. Math Camp)** Fall 2023
- Held discussion sessions and office hours for John Kennan; prepared handouts on proofs, metric spaces, optimization, and linear algebra






Conference and Seminar Presentations

- 60th Annual Meeting of the Canadian Economics Association (Talk)** May 2026
- New York Camp Econometrics XX (Poster Session)** April 2026
- New York Camp Econometrics XIX (Poster Session)** April 2025

Awards and Scholarships

- Student Research Grants – Conference Presentation** UW – MADISON 2025
- Juli Plant Grainger Teaching Excellence Scholarship** UW – MADISON Fall 2023
- Two-Year Graduate School Fellowship** UW – MADISON 2022
- Scholarship** GERMAN ACADEMIC SCHOLARSHIP FOUNDATION 2016 – 2024
- Honors Program** UNIVERSITY OF BONN 2019 – 2022

Selected Earlier Projects and Service

- Co-Organizer:** Ph.D. Student Reading Group – Econometrics
- Master’s Thesis:** Bugni and Horowitz (2021) Permutation Tests for the Equality of Distributions of Functional Data [Repo](#) 
- Course Project:** Basis Choice for Scalar-on-Function Regression with Applications to Near-Infrared Spectroscopy [Repo](#) 
- Course Project:** Outlier Detection in Sensor Data using Functional Depth Measures [Repo](#) 
- Course Project:** Comparison of Variable Importance Feature Selection Methods in Continuous Response Random Forest [Repo](#) 
- Bachelor’s Thesis:** Malicious Intent and Multiple Testing in Regression Discontinuity Estimation [PDF](#) 

Citizenship and Languages

- Citizenship** German
- Languages** German (native) English (fluent) French (intermediate) Mandarin (beginner)