Shunkei Kakimoto

Department of Applied Economics, University of Minnesota
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kakim002@umn.edu

RESEARCH INTERESTS

Primary Fields
Environmental and natural resource economics

Secondary Fields
Agricultural economics, Production economics,

ACADEMIC BACKGROUND

Ph.D., Applied Economics	Present
University of Minnesota	
M.S., Agricultural Economics	2022
University of Nebraska-Lincoln	
B.S., Agricultural Economics	2019
Hokkaido University, Japan	

JOURNAL ARTICLES (Peer-Reviewed)

Mieno, T., Foster, T., **Kakimoto, S.**, & Brozović, N. (2024). Aquifer depletion exacerbates agricultural drought losses in the US High Plains. Nature Water, 1-11.

Kakimoto, S.., Mieno, T., Tanaka, T. S., & Bullock, D. S. (2022). Causal forest approach for site-specific input management via on-farm precision experimentation. Computers and Electronics in Agriculture, 199, 107164.

WORK IN PROGRESS

Kakimoto, S. and Mieno, T. "Size and the Nature of Measurement Error in Gridded Weather Datasets and its Consequential Estimation Bias in Regression Model: an Application to PRISM Datasets for the US Midwest Regions"

Kakimoto, S. "Heterogeneous Effects of the Adoption of Modern Irrigation Technology - Empirical Evidence and Economic Theory"

Gallagher, N. and **Kakimoto, S.** "The Ag-Response Model: For Analyzing Nitrogen Use and Best Management Practice Adoption by Minnesota Crop Farmers"

Gallagher, N. and **Kakimoto, S.** "Yield Response to Nitrogen in Agricultural Production Models"

TEACHING EXPERIENCE

Instructor, University of Minnesota
Introduction to R Statistical Analysis Software   Summer 2024
- The course website is available here.

Teaching Assistant, University of Minnesota   Fall 2023 - Fall 2024
APEC 1101 - Principles of Microeconomics, Undergraduate
APEC 8211 - Econometric Analysis I, Ph.D.
APEC 8212 - Econometric Analysis II, Ph.D.
APEC 8003 - Applied Microeconomic Analysis of Game Theory and Information,

Ph.D.
APEC 8004 - Applied Microeconomic Analysis of Social Choice and Welfare, Ph.D.

Teaching Assistant, University of Nebraska-Lincoln   Fall 2020, Spring 2022
AECN 896-003 (Applied Econometrics, M.S.)

WORK EXPERIENCE	***Graduate Research Assistant*** ***University of Minnesota***	2025 - present

Graduate Research Assistant   2021 - 2022
Daugherty Water for Food Global Institute at University of Nebraska
- Studied the heterogeneous impact of groundwater allocation limits (quota) on groundwater use in Nebraska
- Studied the impact of drought and policies on agricultural land values

Graduate Research Assistant   2019 - 2021
University of Nebraska-Lincoln
- Studied the application of a causal machine learning method to site-specific input management
- Mentored undergraduate student through the thesis process

ACADEMIC PRESENTATION
"Size and the Nature of Measurement Error in Gridded Weather Datasets and its Consequential Estimation Bias in Regression Model: an Application to PRISM Datasets for the US Midwest Regions" at the
- AAEA annual meeting in Denver, CO (July 2025)
- AERE conference in Santa Ana Pueblo, NM (May 2025)

"Yield Response to Nitrogen in Agricultural Production Models" at the AAEA annual meeting in Denver, CO (July 2025).

"Machine Learning Methods for Site-specific Input Management" at the conference on Farmer-centric On-farm Experimentation (October 2021)

SEMINAR PRESENTATION
"Introduction to Making Presentation Slides with Xaringan"
- Applied Economics Student Workshop Series at the University of Minnesota, April 2024

AWARDS AND FELLOWSHIPS
CFANS Graduate Assistant Teaching Award (2025), College of Food, Agricultural and Natural Resource Sciences, University of Minnesota
Teaching Assistant Award for 5000/8000 Level Classes (2023-2024), Department of Applied Economics, University of Minnesota
Summer Scholarship (Summer 2023), University of Minnesota
Graduate Fellowship (Spring 2023), University of Minnesota
Mary A. and Robert B. Litterman Fellowship (Fall 2022), University of Minnesota
Tomek Outstanding M.S. Student (Spring 2022), University of Nebraska-Lincoln

ADDITIONAL SKILLS
- Programming skills: Proficient in R, spatial data processing with R,; Working knowledge of Julia, Python and STATA
- Languages: Japanese (native), English (fluent)