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TIMOTHY SUDIJONO

Education

Ph.D., Statistics, **Stanford University**, 2021 - 2026, expected.
NSF GRFP. Advised by Sourav Chatterjee.

Sc.B., Applied Mathematics, **Brown University**, 2015 - 2019.
Magna Cum Laude, Honors. Advised by Kavita Ramanan.

Industry Experience

Experimentation & Causal Inference Intern, **Netflix**, 2024.
Experimentation Platform.

Portfolio Implementation, Analyst, **AQR Capital Management**, 2019 - 2021.
Long Short Equities.

Research Interests

Statistics: Causal Inference, Neural Networks
Probability: Statistical Mechanics, Markov Chains

Research

* denotes alphabetical ordering or equal contribution.

8. **T. Sudijono**, L. Lei, L. Masoero, S. Vijaykumar, G. Imbens, J. McQueen. "Regression Adjustments for Experimental Designs in Two-Sided Marketplaces" (2024). *Work in Progress.* *Accepted at CODE@MIT 2024*

7. **T. Sudijono**, S. Ejdemyr, A. Lal, M. Tingley. "Optimizing Returns to Experimentation Programs" (2024). *Draft Available Upon Request.* *Accepted at CODE@MIT 2024*

6. S. Chatterjee*, **T. Sudijono***. "Non-Identifiability distinguishes Neural Networks among Parametric Models" (2023+). *Draft Available Upon Request.*

5. **T. Sudijono**, S. Chatterjee. "Neural Networks Generalize on Low Complexity Data." (2024). *To be submitted*.
ArXiv

4. L. Lei*, **T. Sudijono***. "Synthetic Control Inference via Refined Placebo Tests" (2024). *Submitted.* *Accepted at CODE@MIT 2023, ACIC 2024, Cal Metrics 2024.*
   ArXiv software

3. **T. Sudijono**. "Fluctuation Bounds in the Restricted Solid-on-Solid Model of Surface Growth" (2023). *Submitted*.
   ArXiv

2. W. S. Tang*, G. M. da Silva*, H. Kirveslahti, E. Skeens, B. Feng, **T. Sudijono**, K. Yang, S. Mukherjee, B. Rubinstein, L. Crawford. "A Topological Data Analytic Approach for Discovering Biophysical Signatures in Protein Dynamics" (2022). *PLOS Computational Biology*.
   BioArXiv

1. B. Wang*, **T. Sudijono***, H. Kirveslahti*, T. Gao, D. M. Boyer, S. Mukherjee, and L. Crawford. "A statistical pipeline for identifying physical features that differentiate classes of 3D shapes" (2021). *Annals of Applied Statistics*.
   BioArxiv Journal software

Grants, Honors, & Awards

NSF GRFP Fellow, 2021-2024
Rohn Truell Premium Prize, 2019 (Top Brown Applied Math Graduate)
Phi Beta Kappa, 2019
Brown University Junior Calculus Exam Prize 2018
Karen T. Romer Undergraduate Teaching and Research Award, 2017
William Lowell Putnam Exam Top 150, 2015

Teaching

7. Introduction to Statistics for Engineering and the Sciences, TA, Stanford, Fall 2024.

6. Theory of Statistics II (Graduate) TA, Stanford, Winter 2024.

5. Probability Qualifying Exam Coaching, **Instructor**, Stanford, Summer 2023

4. Graduate Probability Department Tutor, Stanford, Spring 2023, Autumn 2023.

3. Theory of Probability II (Graduate) TA, Stanford, Winter 2023

2. Theory of Probability I (Graduate) TA, Stanford, Fall 2022

1. Time Series Analysis TA, Stanford, Fall 2021

Contributed & Invited Talks

3. *Synthetic Control Inference via Refined Placebo Tests.*
   Stanford-Berkeley Causal Panel Data Conference, October 2023. CODE@MIT 2023 Slam + Poster Session, Nov. Stanford Causal Science Conference, Nov. 2023 Stanford GSB Data Driven Decisions Seminar, February 2024. Professor Art Owen's Stanford Group Meeting, June 2024. Netflix ML and Inference Research Seminar, July 2024. California Econometrics Conference, Sept. 2024

2. *Optimizing Returns to Experimentation Programs*
   CODE@MIT 2024, Netflix Statistics, Methodology, Engineering Seminar 2024, Causal Data Science Meeting 2024

1. *Regression Adjustments for Experimental Designs in Two-Sided Marketplaces*
   CODE@MIT 2024, Stanford Industrial Affiliates Conference 2024, Stanford Causal Science Conference, Oct. 2024

Skills

Programming: Python • R

Outreach

Stanford Future Advancers of Science and Technology, Mentor, 2022