

Seamus Somerstep

Ann Arbor, Michigan — smrstep@umich.edu — (970) 691-2752

EDUCATION

University of Michigan

PhD Statistics

Enrolled: September 2021 — Expected: May 2026

GPA: 3.89

Colorado State University

B.S. Mathematics

Enrolled: September 2016 — Graduated: May 2021

GPA: 3.9

Minor Physics

PUBLICATIONS

1. *Seamus Somerstep, Felipe Maia Polo, Allysson Flavio Melo de Oliveira, Prattyush Mangal, Mírian Silva, Onkar Bhardwaj, Mikhail Yurochkin, and Subha Maity.—CARROT: A Cost Aware Rate Optimal Router— Under Review*
2. *Felipe Maia Polo, Seamus Somerstep, Leshem Chosen, Yuekai Sun, and Mikhail Yurochkin.—Sloth: scaling laws for LLM skills to predict multi-benchmark performance across families— Under Review*
3. *Seamus Somerstep, Felipe Maia Polo, Moulinath Banerjee, Ya'acov Ritov, Mikhail Yurochkin, and Yuekai Sun—A Transfer Learning Framework for Weak-to-Strong Generalization—In International Conference on Learning Representations (ICLR), 2025*
4. *Daniele Bracale, Felipe Maia Polo, Subha Maity, Seamus Somerstep, Moulinath Banerjee and Yuekai Sun—Microfoundation Inference in Strategic Prediction—In International Conference on Artificial Intelligence and Statistics (AISTATS), 2025*
5. *Renzo Cavalieri, Bryson Owens, Seamus Somerstep—All the λ_1 's on Cyclic Admissible Covers—Accepted, Proceedings of the American Mathematical Society, 2025*
6. *Seamus Somerstep, Ya'acov Ritov, Yuekai Sun—Algorithmic Fairness in Performative Policy Learning: Escaping the Impossibility of Group Fairness—In ACM Conference on Fairness Accountability and Transparency (FAccT), 2024*
7. *Seamus Somerstep, Yuekai Sun, Ya'acov Ritov—Reverse Causal Strategic Learning with Ramifications in Two Sided Markets—In International Conference on Learning Representations (ICLR), 2024*

EXPERIENCE

Goldman Sachs

June 2025 - August 2025

- *Quantitative Strategist (Summer Associate):* Incoming intern in FICC.

University of Michigan

September 2021 - Ongoing

- *Graduate Student Research Assistant:* Published multiple research projects related to algorithmic fairness, transfer learning, and large language models.
- *Graduate Student Instructor:* Taught lab sections and hold office hours for undergraduate and graduate courses such as Data Mining and Machine Learning, Introduction to Statistical Theory, Applied Regression Analysis, and Introduction to Statistics and Data Analysis.

CONTRIBUTED TALKS

- **Algorithmic Fairness in Performative Policy Learning** MSSISS 2024
- **From Equity to Equality in Performative Prediction** IMS International Conference in Statistics and Data Science
- **Reverse Causal Strategic Learning with Ramifications in Two Sided Markets** Algorithmic Fairness Through the Lens of Time 2023

HONORS AND AWARDS

- Paper submission awarded oral presentation at Algorithmic Fairness Through the Lens of Time 2023 Neurips Workshop
- Awarded Barry Goldwater Scholarship, 2019