

Dan Waxman

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EDUCATION

Ph.D. Electrical Engineering, *In Progress*
Stony Brook University
Advisor: Petar Djurić

B.S. Mathematics & Applied Mathematics and Statistics (*cum laude*), 2021
Stony Brook University

RESEARCH INTERESTS

Causal inference — particularly causal structure learning and studies related to confounders

Fusion methods — particularly Bayesian model combination

Bayesian optimization — particularly in dynamic settings and with non-conventional surrogate models

PUBLICATIONS

* denotes joint first-authorship

In Preparation

2023 **D. Waxman***, G. Koliander*, P.M. Djurić, F. Hlawatsch.
Bayesian Regression Combination. *In Preparation*.

Journal Papers

2023 **D. Waxman**, K. Butler, P.M. Djurić.
DAGMA-DCE: Interpretable, Non-Parametric Differentiable Causal Discovery. *Submitted*.

Conference Papers

2023 Y. Liu, C. Cui, **D. Waxman**, K. Butler, P.M. Djurić.
Detecting Confounders in Multivariate Time Series Using Strength of Causation. To appear in *Proceedings of the 2023 31st European Signal Processing Conference (EUSIPCO), Helsinki, Finland, 2023*.

RESEARCH TALKS

2023 Acoustics Research Institute of the Austrian Academy of Sciences (Institut für Schallforschung der Österreichische Akademie der Wissenschaften) ([link](#))
Talk Title: “Causal Discovery via Quantifying Influences”

2023 Bellairs Workshop on Machine Learning and Statistical Signal Processing for Data on Graphs
Talk Title: “Bayesian Combination”

TEACHING

- Sum'22 Random Signals and Systems (ESE 306 @ SBU), Teaching Assistant
Spr'22 Random Signals and Systems (ESE 306 @ SBU), Teaching Assistant
Fall'21 Programming Fundamentals (ESE 124 @ SBU), Teaching Assistant

OUTREACH & SERVICE

Service

- 2021-23 Stony Brook University Graduate Student Organization
Primary Senator, Department of Electrical & Computer Engineering
Member of Diversity, Equity, and Inclusion Committee
Graduate Student Representative for the Graduate Council
Reviewer for the Distinguished Travel Award
- 2022-23 SBU Strategic Planning Committee ([link](#))
Member of the Strategic Planning Committee, helping to identify priorities for upcoming strategic plan.
Member of Project REACH Visioning Committee and helped draft a new vision statement for the University
- 2020-22 SBUHacks ([link](#))
Mentor (2022)
Partner Relations (2021-22)
Volunteer Coordinator (2021-22)

Expository Talks

- 2022 Stony Brook University Math Club
Making Markov Chains with Metropolis ([link](#))

Mentoring

- 2023 CUNY Directed Reading Program
Masroor Khonkhodzhaev, *Dynamic Programming and Reinforcement Learning*
- 2023 Stony Brook University Directed Reading Program
Shailen Smith, *Probabilistic Machine Learning*
- 2022 CUNY Directed Reading Program
Percy Martinez, *Fourier Analysis and Its Applications*
Isabella Chittumuri, *Elements of Statistical Learning*
- 2022 Bayesian Data Analysis for the Global South (GSU)
Volunteer Teaching Assistant for online course aimed at the Global South and other underrepresented groups taught by Aki Vehtari ([Certificate](#))

Updated October 2023