

# Yidan Xu (she/her)

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<b>CONTACT INFORMATION</b>	Department of Statistics 436 West Hall University of Michigan Ann Arbor, Michigan, MI 48109	Webpage: <a href="https://edenx.github.io">https://edenx.github.io</a> Email: <a href="mailto:yidanxu@umich.edu">yidanxu@umich.edu</a> Language: English, Mandarin
<b>RESEARCH INTERESTS</b>	<ul style="list-style-type: none"><li>- Optimal Transport</li><li>- Causal Inference</li><li>- Generative Models</li><li>- Bayesian Nonparametrics</li></ul>	
<b>EDUCATION</b>	<b>University of Michigan</b> , Ann Arbor, USA <i>Ph.D. Candidate, Statistics</i> Advisors: <ul style="list-style-type: none"><li>* Xuanlong Nguyen</li><li>* Yixin Wang</li></ul>	<i>09/2021-Present.</i>
	<b>University of Washington</b> , Seattle, USA <i>M.S., Statistics</i> Graduation commencement speaker, representative of Class 2019 MS graduates.	<i>09/2019 - 06/2021</i>
	<b>Imperial College London</b> , London, UK <i>B.Sc., Mathematics with Statistics</i> Dean's List 2019, top 5% of 200 students.	<i>09/2016 - 06/2019</i>
<b>PUBLICATION</b>	(† co-first author)	
<b>ACCEPTED</b>	Semenova, E. <sup>†</sup> , <b>Xu, Y.</b> <sup>†</sup> , Howes, A., Rashid, T., Bhatt, S., Mishra, S., & Flaxman, S. (2022). PriorVAE: encoding spatial priors with variational autoencoders for small-area estimation. <i>Journal of the Royal Society Interface</i> , 19(191), 20220094.	
	Zhu, Q. <sup>†</sup> , Yang, C. <sup>†</sup> , <b>Xu, Y.</b> , Wang, H., Zhang, C., & Han, J. (2021). Transfer learning of graph neural networks with ego-graph information maximization. <i>Advances in Neural Information Processing Systems</i> .	
<b>IN PROGRESS</b>	<b>Xu, Y.</b> <sup>†</sup> , Wang, Y. & Nguyen, X. Stable causal inference with optimal transport.	
	<b>Xu, Y.</b> <sup>†</sup> , Wang, Y. & Nguyen, X. Partial identification of causal effect in probability spaces.	
	<b>Xu, Y.</b> <sup>†</sup> , Wang, Y. & Nguyen, X. A distributional approach to mixture model estimation.	
	<b>Xu, Y.</b> <sup>†</sup> , Wang, Y. & Nguyen, X. Flow matching for efficient inference in structured graphical models.	
<b>TEACHING</b>		
<b>LAB INSTRUCTOR</b>	<i>STATS/DATASCI 451: Bayesian Data Analysis</i>	<i>2024 Fall, UM</i>
	<ul style="list-style-type: none"><li>- Undergraduate level Bayesian inference, principles and practice for data analysis with Stan.</li></ul>	

*STATS 415: Data Mining* 2023 Fall, UM  
- Introductory level statistical modelling aimed for data analysis.

*STATS 551: Topics in Bayesian modeling and computation* 2022 Fall, UM  
- Graduate level Bayesian modeling and computation with modern techniques.

*STATS 250: Introduction to Statistics and Data Analysis* 2022 Winter, UM  
- Introductory statistics course for non-statistics major undergraduate students.

**AWARDS** *Mary Lister McCammon Research Fellowship* 2019 Summer, ICL  
- Awarded to 14 female undergraduate students in Mathematics and Statistics across UK.

*BP Undergraduate Research Opportunities Project Awards* 2018 Summer, ICL  
- Awarded to students undertaking UROP project at Imperial College, 1 in every department.

**SERVICE** *Chair of Student Seminar Council* 2023 Winter, UM  
- Coordinated with faculty members and Ph.D students to participate in the student seminar series.  
- Organized and mediated ‘How to choose your advisors panel’.  
- Hosted weekly student seminar on faculty research presentations.

*Reviewer AISTATS 2024*

**COMPUTING SKILLS** *Programming Language*  
Python, R, MATLAB  
*Tool & Framework*  
JAX, NumPyro, Stan, INLA, Pytorch, TensorFlow