

Alec McClean

Contact	5000 Forbes Ave, Pittsburgh PA, 15213 https://alecmcclean.github.io alec@stat.cmu.edu mccleanalec@gmail.com	
Education	Carnegie Mellon University Ph.D., Statistics <i>Thesis: Heterogeneity, Optimality, and Sensitivity in Causal Inference</i> M.S., Statistics	May 2024 (Expected) May 2021
	Swarthmore College B.A., Economics and Mathematics <i>Phi Beta Kappa</i>	May 2016
Research Interests	Theory: causal inference; functional estimation; nonparametric and machine learning methods Applications: healthcare services research; criminology; medicine	
Research Projects	Nonparametric Estimation of Conditional Incremental Effects <i>Under review at the Journal of Causal Inference</i> https://arxiv.org/pdf/2212.03578.pdf Poster presentations at ACIC 2022, ENAR Spring Meeting 2023, and JSM 2023 Incremental causal effects: an introduction and review <i>Published in the Handbook of Matching and Weighting Adjustments for Causal Inference, 2023</i> https://arxiv.org/abs/2110.10532 Incremental Propensity Score Effects for Criminology: An Application Assessing the Relationship Between Houselessness, Behavioral Health Problems, and Recidivism <i>Revise and resubmit at the Journal of Quantitative Criminology</i> https://arxiv.org/abs/2305.14040	
Ongoing Work	Double Cross-fit Doubly Robust Estimators: Beyond Series Regression <i>Winner of the Ten Have poster competition at ACIC 2023</i> https://alecmcclean.github.io/files/ACIC2023.pdf	
Academic Service	Referee for <i>Bernoulli</i> CMU Statistics Student Activities Committee representative Pittsburgh ASA CMU student representative	2019 - Present 2022 - Present

Teaching	Department of Statistics and Data Science, Carnegie Mellon University	
	As Course Instructor	
	<i>Introduction to Statistical Inference</i>	Summer 2022
	As Teaching Assistant	
	<i>Optum Summer Undergraduate Research Experience</i>	Summer 2023
	<i>Undergraduate Causal Inference</i>	Spring 2022 & 2023
	<i>Graduate Causal Inference</i>	Fall 2022
	<i>Advanced Methods for Data Analysis</i> (served as Head TA)	Spring 2021
	<i>Methods for Statistics</i>	Summer 2021
	<i>Modern Regression</i>	Fall 2019
	Heinz College of Information Systems and Public Policy, Carnegie Mellon University	
	<i>Statistical Reasoning with R</i> (served as Head TA)	Fall 2020 & 2021
Work Experience	Senior Research Analyst , The Brattle Group	2018 - 2019
	<ul style="list-style-type: none"> Managed teams of 10+ junior analysts in developing econometric and statistical models (including zero-inflated Poisson, Cox survival, and hierarchical Bayes) to create a state-of-the-art economic structural model of the health insurance industry. Acquired extensive case experience in the health care industry with a focus on modelling expected claims incurred by health insurance subscribers and company likeliness to switch insurers. 	
	Research Analyst , The Brattle Group	2016 - 2018
	<ul style="list-style-type: none"> Cleaned, analyzed, and organized large data sets (> 100 GBs) using SQL, R, and Python. Created a >50 script data processing pipeline to efficiently clean and collate several TBs of data into analyzable data sets for project team use. 	
Awards	Phi Beta Kappa , Swarthmore College	Spring 2016
	Cumulative undergraduate GPA: 3.91	
	Kwink Trophy , Swarthmore College	Spring 2016
	Senior who best exemplifies the five principles of Service, Spirit, Scholarship, Society and Sportsmanship	
	Scholar Athlete of the Year	Fall 2014
	Centennial Conference All-Conference athlete with the highest GPA	
Skills	R, Python, L ^A T _E X, Microsoft Office	