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Education

 ${\bf University\ of\ Washington},\,{\rm Seattle},\,{\rm Washington}.$

2018-Present

Statistics PhD Student, GPA 3.84

Williams College, Williamstown, MA

2014-2018

BA in Mathematics (Highest Honors) and Computer Science.

Summa Cum Laude, GPA 4.04.

Research Experience Research Assistant (University of Washington)

2020-Present

• Advisor: Daniela Witten

• Selective inference for CART regression trees.

Williams College Undergraduate Honors Thesis

2017-2018

• Advisor: Brianna Heggeseth

• Longitudinal regression trees for clustering body mass index trajectories.

SMALL Research Experience for Undergraduates

Summer 2016

• Advisors: Julie Blackwood and Lauren Childs

• Comparing the relative contributions of sexual transmission and vector transmission in the spread of the Zika virus.

Teaching Experience

Instructor of Record

Summer 2019

University of Washington Department of Statistics

• Full responsibility for Stat 311, Elements of Statistical Methods. There were 61 students in the class.

Head Teaching Assistant

Autumn 2019, Winter 2020

University of Washington Department of Statistics

- Developed lab assignments for Stat 311, maintained lab website, helped write assignments and exams, served as liaison between Professor and other TAs.
- Led lab sections for two sections of 30 undergraduates each. Developed lab materials for a total of 195 students.

Teaching Assistant

2018-2020

University of Washington Department of Statistics

- Teaching assistant for Stat 311 (Autumn 2018, Spring 2020), Stat 423- Applied Regression (Winter 2019), and CSE/Stat 416- Introduction to Machine Learning (Spring 2019).
- Responsible for lab sections of around 30 undergraduates each. Also held office hours and graded assignments.

Teaching Assistant

September 2015 - May 2018

Williams College Departments of Computer Science, Mathematics, and Statistics

- Teaching assistant for Data Structures (F15), Linear Algebra (S16, S17), Abstract Algebra (F16), Regression and Forecasting (F17, S18)
- Duties included grading homework and holding evening help sessions.

Workshop Leader

January 2018

Williams College Office of Academic Resources

- Worked with a group of undergraduates and the Office of Academic Resources to pilot a new program of coding workshops
- Taught a series of workshops in R to undergraduates from a variety of departments and graduate students from the Center for Development Economics.

Peer Tutor 2016-2018

Williams College Office of Academic Resources

- Nominated by faculty to serve as a peer tutor. Held one-on-one and drop-in tutoring sessions for microeconomics, macroeconomics, calculus, linear algebra, real analysis, statistics, and computer science.
- Also worked one on one with biology research students who needed help conducting data analysis in R.

Publications

Maxian, O., Neufeld, A., Talis, E. J., Childs, L. M., & Blackwood, J. C. (2017). Zika virus dynamics: When does sexual transmission matter?. Epidemics, 21, 48-55.

Software

splinetree: longitudinal trees and forests using a spline projection method R package. Available from github and CRAN.

Professional Experience

Cogo Labs, Cambridge, MA

June 2017-August 2017

Data Analytics Intern

• Worked with a team of engineers, designers, and analysts to build and market a website. Analyzed market data with SQL, analyzed site performance with google analytics and piwik, and assisted with backend web development in python.

Honors and Awards

University of Washington

- Dorothy M. Gilford teaching award from the Statistics Department, 2020
- Nominated for a 2021 UW excellence in teaching award

Williams College

- The Erastus C. Benedict First Prize in Mathematics, presented to outstanding sophomore, 2016
- Phi Beta Kappa, Junior Year Inductee, 2017
- Sigma Xi Scientific Honors Society, 2018
- Robert M. Kozelka Prize in Statistics, presented to outstanding senior, 2018
- W. Margaret Canby Award Athletic Scholarship Prize, for highest standing in scholarship among senior varsity athletes, 2018
- New England Small Colleges Athletic Conference (NESCAC) All Sportsmanship selection (One person per team, 2017) and All Academic selection (2016-2018)
- Clare Booth Luce Scholar, 2016-2018

Mentoring

University of Washington Undergrad Directed Reading Program (DRP)

- Co-founded (in 2020) a program that pairs undergraduates with PhD student mentors for independent studies. Modeled after successful Directed Reading Programs (DRPs) in mathematics departments at several universities. More information can be found at our website.
- Served as a graduate student coordinator for 2020-2021.
- Served as a mentor for three quarters.
 - Winter 2020, Christina Nick, Statistical Natural Language Processing
 - Spring 2020, Rachael Ren, Infectious Disease Modeling with Differential Equations. See project writeup and presentation.
 - Autumn 2020, Harper Zhu, Infectious Disease Modeling on a Network. See presentation and shiny app.

Service

- Reviewer for Statistical Science.
- UW Statistics Graduate Student Representative (2020-2021).
- First round review for PhD Admissions (2020, 2021)
- UW Statistics Diversity, Inclusion, Community, and Equity (DICE) Committee (2019-2020)
- Chair of the UW Statistics Fun Committee, 2019-2020
- Organizer and Founder: Statistics Education Reading Group, Autumn 2019-Winter 2020

Skills

- Proficient: R, Python, Java, C, C++, matlab, Mathematica
- Familiar: SQL, html, javascript, CSS