

## Anna Neufeld

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<b>Contact Information</b>	Department of Statistics University of Washington Padelford B-222 Seattle, WA, 98195	aneufeld@uw.edu anna-neufeld.github.io 781-392-4894
<b>Education</b>	<b>University of Washington</b> , Seattle, Washington. Statistics PhD Student, GPA 3.84	2018-Present
	<b>Williams College</b> , Williamstown, MA BA in Mathematics (Highest Honors) and Computer Science. <i>Summa Cum Laude</i> , GPA 4.04.	2014-2018
<b>Research Experience</b>	<b>Research Assistant (University of Washington)</b> Inference for Regression Trees <ul style="list-style-type: none"><li>Working with Daniela Witten on selective inference for CART regression trees.</li></ul> <b>Williams College Undergraduate Honors Thesis</b> Longitudinal Regression Trees for Clustering Body Mass Index Trajectories <ul style="list-style-type: none"><li>Worked with Professor Brianna Heggeseth. Implemented, compared, and modified existing longitudinal regression tree methods. Ran simulation studies to understand behavior of previous methods.</li><li>Developed the R package splinetree, available on github and CRAN.</li></ul> <b>SMALL Research Experience for Undergraduates</b> Zika Virus Dynamics: When does Sexual Transmission Matter? <ul style="list-style-type: none"><li>Conducted research in mathematical ecology under Professor Julie Blackwood and Professor Lauren Childs.</li><li>Used ordinary differential equations to explore the relative contributions of sexual transmission and vector transmission in the spread of the Zika virus; work published in <i>Epidemics</i>.</li></ul>	2020-Present  2017-2018  Summer 2016
<b>Teaching Experience</b>	<b>Instructor</b> University of Washington Department of Statistics <ul style="list-style-type: none"><li>Full responsibility for the course Stat 311, Elements of Statistical Methods, for summer quarter 2019. There were 61 students in the class.</li></ul> <b>Head Teaching Assistant</b> University of Washington Department of Statistics <ul style="list-style-type: none"><li>Developed lab assignments for Stat 311, maintained lab website, helped write assignments and exams, served as liaison between Professor and other TAs.</li><li>Led lab sections for two sections of 34 undergraduates each. Developed lab materials for a total of 195 students.</li></ul> <b>Teaching Assistant</b> University of Washington Department of Statistics <ul style="list-style-type: none"><li>Teaching assistant for Stat 311- Elements of Statistical Methods, Stat 423- Applied Regression, and CSE/Stat 416- Introduction to Machine Learning.</li></ul>	Summer 2019  Autumn 2019, Winter 2020  Autumn 2018

- Responsible for lab sections of around 30 undergraduates each. The purpose of the lab was to reinforce concepts from lecture. 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 over our January Term
- 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

**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. Kusilka 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**

### **Statistics and Probability Association Directed Reading Program (SPA-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 [spa-drp.github.io](https://spa-drp.github.io).
- Served as a graduate student coordinator for 2020-2021.
- Mentored an undergraduate student in Statistical Natural Language Processing during Winter 2020.
- Mentored an undergraduate student in Modeling Infectious Diseases during Spring 2020.

## **Service**

- Reviewer for Statistical Science.
- UW Statistics Graduate Student Representative (2020-2021).
- Read applications for PhD Admissions (2020)
- 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