

Work

Morning Consult

Senior Research Scientist

October 2023 – Present

- Designed and implemented a fraud detection model that increased data quality by 26% and completion rate by 29%.
- Developed a duplicate respondent detection system that saves the company an estimated 12k per month.

Morning Consult

Research Scientist

September 2021 – September 2023

- Built internal software to monitor survey data quality and to automate sample quota generation. These tools saved our team an estimated 15 hours a week.
- Implemented changes to weighting methodology that reduced bias by over 12%.
- Audited and standardized advanced analytics offerings like segmentation, MaxDiff, and driver analysis.
- Consulted with Product and Engineering teams to improve methodological rigor.
- Directed high impact primary research projects on a wide variety of topics including the habits of professional survey respondents, novel methods for identification of low-quality response data, unconventional weighting methods, and more.

YouGov

Senior Survey Analytics Analyst

June 2020 – September 2021

Portland, OR

- Provided methodological consultation to clients and project managers, designed complex survey weights, and built custom survey frames.
- Built a synthetic sampling frame by combining several large survey data sets using multiple imputation by chained equations.
- Built YouGov's internal analytics wiki, which played a major role in analytics on-boarding.

Vanderbilt University

Graduate Research/Teaching Assistant

September 2016 – June 2020

Nashville, TN

- Trained and managed a team of 5-10 to deploy a bi-annual [survey](#) of Vanderbilt undergraduates.
- Conducted topic modeling, content analysis, and sentiment analysis on text data mined from newspapers, presidential debates, and the Twitter API.
- Designed, deployed, and analyzed dozens of surveys using crowd-sourced survey data from MTurk and Lucid as well as national samples from SSI, GfK, and YouGov.
- Assisted in teaching two graduate-level and one undergraduate-level statistics course for the Political Science department: Advanced Statistical Analysis, Causal Inference, and Data Science for Politics.
- Instructor for graduate-level [R programming course](#).
- Built five [R packages](#), some of which are widely used.
- Published research on polarization and dehumanization in academic journals that received wide media coverage including [Washington Post](#), [The Economist](#), [New York Times](#), [The Atlantic](#), [Vox](#), and [USA Today](#)

Center for the Study of Elections and Democracy

Research Fellow

April 2014 – April 2016

Provo, UT

- Managed a committee of 8 people for a large statewide [exit poll](#) during the 2014 election and trained hundreds of exit poll workers.
- Scraped thousands of tweets about political candidates and conducted sentiment analysis. Won first prize for my project at a college-wide conference.

Education

Vanderbilt University

PhD, MA Political Science

2016 – 2020
Nashville, TN

Brigham Young University

BA Political Science, Minor in Statistics

2013 – 2016
Provo, UT

Duke University

Summer Institute in Computational Social Science

2020
Durham, NC

Skills

Software R, SQL, QUALTRICS, STATA

Research Experimental design, Survey Methodology, Natural Language Processing/Text Analysis, Causal Inference, Qualitative Interviews

Languages English (native), Spanish (professional)