# **Sean Bock**

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## **EDUCATION**

Harvard University

Ph.D., Sociology

Cambridge, MA

2023

Dissertation: "Rethinking Polarization: A multi-level approach to the study of political disagreement"

- Institute for Quantitative Social Science, Graduate Student Affiliate
- Harvard Center for Population and Development Studies, Graduate Student Affiliate

A.M., Sociology 2020

Indiana University Bloomington, IN

B.A., Sociology and Political Science

• Highest Distinction, Phi Beta Kappa, Honors in Sociology

### PROFESSIONAL EXPERIENCE

Abt Associates Cambridge, MA
Data Analytics Specialist 2023-Present

- Applied advanced statistical analyses to extract meaningful insights from complex datasets, leveraging techniques such as regression analysis, cluster analysis, natural language processing, and hypothesis testing, using programs such as R, Python, and SAS
- Spearheaded the development of a new coding workflow for the creation of an annual public-facing dataset for a federal organization, enhancing efficiency and accuracy in data processing
- Generated compelling and insightful visualizations using tools such as R and Power BI, effectively communicating complex data trends to both technical and non-technical stakeholders
- Presented deliverables to clients, translating complex technical findings into actionable insights, fostering client understanding and satisfaction

### **Washington University in St. Louis**

St. Louis, MO (Remote)

Research/Data Science Consultant

2022-2023

2016

- Consulted clients on research and data analysis strategies
- Constructed R package to improve analytical workflow when implementing clustering models (k-modes)
- Enhanced client's project efficiency by streamlining modeling tasks and creating automated visualizations to communicate insights

# **Harvard University Department of Sociology**

Cambridge, MA

PhD Researcher

2017-2023

- Designed, managed, and executed all aspects of 5 large-scale research projects using R and Stata
- Analyzed large longitudinal and cross-national surveys using advanced statistical techniques, including multivariable regressions, cluster analysis, machine learning, and natural language processing
- Communicated insights to different audiences in 6 first- and co-authored publications in top peer-reviewed
  journals, a non-technical article published in the <u>Washington Post</u>, presentations at national conferences, and
  interviews at media outlets

## **New York University**

New York, NY (Remote)

Adjunct Instructor, Introduction to Computational Text Analysis

2022

Assisted in teaching over 30 NYU graduate students on text mining (natural language processing) methods using
 R

- Developed and conducted weekly 1-hour coding demos on topics including: Machine learning, topic modeling, networks, web scraping, and visualization
- Led weekly lab meetings and consulted students on coding assignments and research projects

## **Harvard University Department of Sociology**

Cambridge, MA

2017-2021

Research Assistant

- Led team of research assistants on data cleaning, analysis, synthesis, and organization tasks
- Extracted insights from survey and text data using unsupervised machine learning, regression, GLM, factor analysis, and other statistical techniques using R, Stata, and Latent Gold
- Constructed intuitive data visualizations to convert research and data analysis into clear narratives
- Managed large collaborative projects using version control (Git) and automated reporting with R Markdown

## LEADERSHIP/TEAMWORK EXPERIENCE

## **Harvard University Department of Sociology**

Cambridge, MA

**Teaching Fellow** 

2019-2022

- Assisted in teaching 4 Harvard undergraduate courses. Topics included: Social determinates of health and health inequities, Research methods, and Political sociology
- Prepared course materials, including lectures, exams, homework, and practice problems
- Led weekly discussion sections for groups of 10-20 students
- Awarded the Certificate of Distinction in Teaching from Harvard's Derek Bok Center

## **Harvard University Department of Sociology**

Cambridge, MA

Senior Thesis Adviser

2020 - 2021

- Supervised and mentored an undergraduate sociology major in planning, executing, and writing an original thesis on Twitter discourse using Python
- Winner of the Harvard Hoopes Prize, awarded to undergraduates for outstanding scholarly work or research

## **Harvard University Department of Sociology**

Cambridge, MA

Quantitative Advisor

2020 - 2021

- Provided statistical and technical consultation to graduate and undergraduate students
- Advised students on connecting research questions with appropriate analytical methods
- Assisted with coding in R and Stata

## **SKILLS**

- Computer: R (tidyverse, R Shiny, R Markdown), Power BI, Stata, Python, SQL, LaTeX, Latent Gold
- **Analytical**: data mining, text mining (natural language processing), statistical analysis (regression analysis, clusters analysis, exploratory analysis), data visualization, web scraping

## **PUBLICATIONS AND CONFERENCE PRESENTATIONS**

- 3 first-author publications in scientific journals: PLoS ONE (2022); Socius (2021); Socius (2021)
- 3 co-authored publications in scientific journals: *American Journal of Sociology* (2021); *Sociological Science* (2018); *Sociological Science* (2017)
- 2 publications in non-scientific outlets: GOLF.com (2022); Washington Post (2021)
- 4 presentations at academic conferences and seminars: Social Demography Seminar Series at the Center for Population and Development Studies, Harvard University (2021); Society for the Scientific Study of Religion (2019), The American Sociological Association (2019), Midwest Sociological Society (2016).