Ryden Winfield Butler

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Education

Washington University in St. Louis, St. Louis, Missouri
Ph.D., Political Science, 2021
Fields: Quantitative Political Methodology & American Politics
Washington University in St. Louis, St. Louis, Missouri
M.A., Statistics, 2021
Washington University in St. Louis, St. Louis, Missouri
M.A., Political Science, 2017
University of Miami, Coral Gable, Florida
B.A., Political Science, History, Economics, 2015 (*magna cum laude*)

Research Experience

Washington University in St. Louis
PhD Researcher — Jun. 2015 - Present

- Data collection & management:
  - *Scraped web & social media data using associated APIs*
  - *Collected data using an online workforce and developed associated R software*
  - *Managed researchers in labeling data and developed associated R software*
  - *Developed and fielded survey experiments on Facebook and Mechanical Turk*
  - *Maintained relational database for the WashU Political Data Science Lab*
- Analysis & inference:
  - *Ordinary Least Squares, Linear Probability Models, and Bayesian Statistics*
  - *Hierarchical, Fixed, Random, and Mixed Effects Models*
  - *Longitudinal and Time Series Models*:
    - *·ARIMA Models*
    - *·Hazard / Survival Models*
  - *Observational Causal Inference*:
    - *·Difference-in-Difference*
    - *·Two-way Fixed Effects*
    - *·Vector Autoregression*
    - *·Generalized Synthetic Control*
  - *Gaussian Process Regression*
  - *Computerized Adaptive Testing and Active Learning*
- Writing & presentation:
  - *Drafted manuscripts for review and publication*
  - *Created figures, tables, and diagrams to visualize research methods and results*
  - *Collaborated with co-authors to synthesize complex projects into coherent papers*
  - *Consolidated research for slideshow and poster presentations*
  - *Verbally presented research at workshops and conferences*

Software Experience

Expert	Proficient	Competent
R	C++	HTML5
Python	STAN	CSS
LaTeX	JAGS	Stata
SQL	Git	Matlab
	Cluster Computing	MPlus

Leadership Experience

Washington University in St. Louis

Instructor   Jul. - Sep. 2019
- Taught intensive Python programming course on topics including: web scraping, relational databases, and text analysis
- Designed interactive course material in Jupyter Notebook
- Led problem-solving labs and individual instruction sessions
- Supervised Teaching Assistant in creating and evaluating problem sets
- Advised students on final projects utilizing their acquired skills

Teaching Assistant   Aug. 2016 - May 2019
- Assisted in instructing 3 graduate applied statistics courses:
    - *Mathematical Modeling*
    - *Quantitative Political Methodology I*
    - *Quantitative Political Methodology II*
- Assisted in instructing 4 undergraduate social science courses:
    - *Public Opinion and American Democracy*
    - *Law, Politics, and Society*
    - *Intolerance in World Politics*
    - *American Constitutional Development*
- Led student teaching workshops and individual instruction
- Created and evaluated course materials, including homework, exams, and guides
- Managed course websites

Industry Experience

YouGov Data Science

Junior Contractor: Election Night Support   Oct. - Nov. 2018
- Provided on-call troubleshooting for election night web scrapers
- Collaborated with a team to ensure data quality & triage code exceptions
- Pushed R code hotfixes via GitHub

Academic Writing

"Responsiveness on Social Media: Do Elected Officials or the Virtual Public Lead the Discussion?" *Working paper.*

"Campaign Dynamics, Primary Elections, and Extremism: Do U.S. Congressional Candidates Moderate Their Message After Winning a Primary?" *Working Paper.*

"Active Learning with Gaussian Process Regression for Efficient Human Coding of Political Texts." *Working paper.* (with R. Garnett and J. Montgomery)

"Estimating Unbiased Treatment Effects Under Non-Random Attrition." *Working paper.* (with L. Keele, D. Miller, and J. Montgomery)

2018. "Revisiting White Backlash: Does Race Affect Death Penalty Opinion?" *Research & Politics*, 5(1). (with B. Nyhan, J. Montgomery, and M. Torres)

2013. "The Epistemology of Fact Checking." *Critical Review*, 25(2): 162-180. (with J. Uscinski)