Brandon Derr

People-centered Data Analyst

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Hattiesburg, MS   (Desire to relocate)

Professional Statement

People-centered data analyst with graduate-level training in analytics, statistics, and research methodology. Experienced in developing end-to-end data pipelines, performing rigorous modeling, and communicating complex findings as clear, actionable insights. Brings strong professional communication skills and experience working collaboratively across teams to support data-driven decision-making.

Core Competencies

Programming: Python, R, SQL; Git/GitHub; Jupyter, RStudio
Statistical Modeling: Regression, GLMs/GLMMs, forecasting, experimental design, fixed effects
Data Engineering: ETL workflows, API integration, large-scale preprocessing, reproducible pipelines
Analytics: Data visualization, EDA, feature engineering, machine learning classification
Communication: Technical writing, presentations, stakeholder coordination, cross-team collaboration

Relevant Projects

Bluesky Political Polarization   Jun – Oct 2025

- Collected and analyzed 80,000+ Congressional posts from Bluesky to study political polarization.

- Built an end-to-end analysis pipeline (scraping, cleaning, sentiment analysis, negative binomial modeling).

- Found that polarized posts receive 91% more likes and 62% more replies than neutral ones.

- Presented findings and defended methodological decisions to supervisors.

LLMs for Sentiment Analysis   2024

- Designed a zero-shot topic classifier using major AI APIs (Anthropic, OpenAI, Mistral).

- Processed 200,000 Tweets in hours instead of days using automated classification pipelines.

- Analyzed models' accuracy, cost, speed, and consistency.

Senate Climate Change Messaging Analysis   2022 – 2024

- Collected 200,000+ Congressional Tweets using a Python scraper, studying policy messaging.

- Trained traditional machine learning models to identify climate policy topics.

- Presented results at 4 academic conferences in North America.

Experience

Graduate Research Assistant   Aug 2024 – Dec 2025
Minerva Research Initiative Grant, Department of Defense (DoD)

- Built and documented an R package that made a large government dataset accessible to researchers, shortening data preparation time and simplifying complex data structures.

- Improved the speed and clarity of key functions by over 50%, helping users run analyses more efficiently and consistently.

- Met with a team of researchers twice a month to gather feedback and make sure the tools I developed fit the project's needs.

- Presented research findings at an international conference, helping share results with a broader audience and strengthening the project's visibility.

Research Intern   Aug 2022 – Dec 2023
Institute for Advanced Analytics and Security, USM

- Identified appropriate data sources for a project by comparing several providers and summarizing tradeoffs to help leadership decide on the best option.

- Cleaned incoming datasets and combined them into a single file ready for modeling.

- Worked with team members in weekly meetings to clarify data needs and confirm that insights matched project goals.

Education

M.A. Political Science, Emphasis: Research Methodology   Dec 2025
University of Southern Mississippi, 3.8 GPA
Click for Masters Thesis

Google Advanced Data Analytics Certificate   Apr 2025
Click for Certificate Link

B.S. Political Science, Magna Cum Laude   May 2024
University of Southern Mississippi, Honors College, 3.7 GPA
Honors Thesis: "Climate Change Policy Preferences and Senatorial Tweets"

Publications

- Kinne, B., Tellez, J., Stewart, A., Iliev, I., **Derr, B.**, Murthy, S., & Bernhard, P. (2025). Interstate Competition and Transnational Threats. (Under Review at *International Organization*)

- Stan, K., Hill, J., Bernstein, D., **Derr, B.**, *et al.* (2025). "Gone with the Wind?" Hardly: The Persistence of Climate Beliefs amid Extreme Events. (Submitted for Review)

- Iliev, I. & **Derr, B.** (2025). Terrorist Responses to Verbal Attacks: Strategic Logic Towards Whom? (Working Paper)