

Experienced researcher with expertise in quantitative and experimental methodologies. Skilled in managing the full data lifecycle (collection, cleaning, advanced analysis). Proven ability to mentor and guide individuals through complex data processes, ensuring high-quality outcomes. Adept at translating and communicating data insights into actionable recommendations through clear visualization, scientific reporting, and presentations to answer key research questions and hypotheses.

TECHNICAL SKILLS

Tools and Languages	R, Python, Java, Shellscript, JavaScript, C, C++, C#, CSS, PHP, SQL
Libraries	GLM, Mixed-Effect Models, Synthetic Control Methods, Time Series Text Analysis
Frameworks	Slurm, ArcGIS, Google Earth Engine
Developer Tools	Git, Linux, VBA, System Administration, Access, Excel, Word
Statistical Tools	Data Analysis, Experimental Design, Linear and Nonlinear Regression Analysis, Causal Inference, Network Analysis, Survey Design and Analysis
Visualization	Tableau

EXPERIENCE

Research Assistant & Instructor

Texas Tech University

Sep 2018 — Aug 2024

Lubbock, TX

- Spearheaded data-driven research projects using advanced statistical analysis, programming, and data management, including advanced skills in R, Python, and Stata.
- Experience with high-performance computing and database management for scalable and efficient structured and unstructured data processing (scrapping, cleaning, merging, and coding) .
- Developed and organized three workshops in R and R Studio for graduate students in the implementation of methods for research projects covering the following topics: data cleaning, merging datasets, running statistical models, data visualization, and data analysis.

Independent Researcher

Executive Cabinet Composition Dataset

Jan 2018 — Aug 2018

Caracas, VE

- Data collection and archival work from the period 1979 to 1993 for the Executive Cabinet Composition Dataset for Venezuela.
- The aim of this project was to analyze cabinet rotation and coalition formation across presidential administrations in Venezuela.

PROJECTS

Authoritarian Electoral Engineering

Data analysis of Venezuela’s National Electoral Committee election results and voter registry

Jan 2024 — Present

- Produced a large dataset of 142 million observations that contains the electoral registry of Venezuela 2013-2024.
- Employed the Apache Pivot library to handle the dataset, the Slurm framework to perform basic EDA, and regression analysis using Python in a high-performance computing center.

The Crisis of Divided Government

The Effect of Democratic Backsliding on Legislative Oversight in Venezuela

Jan 2023 — Aug 2023

- Data collection mainly from the Varieties of Democracy (V-Dem) and Episodes of Regime Transition (ERT) datasets.
- A synthetic control method (SCM) using the *synth* library in Stata grasps the effect of democratic backsliding on legislative oversight overtime using panel data, which includes 37 countries from 1959 to 2019.

The Long Trace of Oil Money

A Social Network Analysis of Corruption during the Bolivarian Revolution in Venezuela

Jan 2021 — May 2022

- Determinants for tie formation in the network based on the Quadratic Assignment Procedure (QAP).
- Logistics regressions at the actor-level to assess kinetic and non-kinetic strategies taken by both International and US authorities in order to disrupt the corruption network in Venezuela

EDUCATION

Doctor of Philosophy and Master of Arts in Political Science, Texas Tech University	Aug 2023
Graduate Certificate in Geopgraphic Information Science & Technology, Texas Tech University	Dec 2022
Bachelor of Science in Computer Engineer, Universidad Simon Bolivar	Nov 2015