Pursuing a career in data science to help businesses make data-informed decisions. Relocating to Denver, CO July 1st.

Education

University of Iowa, PhD, Political Science   expected Dec 2019

- Major in econometrics and international relations.

University of Iowa, MA, Political Science   May 2019
St. Ambrose University, BA, International Studies and Spanish   May 2016

Projects

Dissertation*: Political Prediction acros Space and Time: Ensemble Machine Learning to Predict Terrorism and Protests*

Build ensemble machine learning models to predict political events as locally as possible and at the finest temporal aggregation possible.
Gather, clean, and collect geocoded event, climate, terrain, socio-economic, and historical data. Transform this data into usable format for analysis from a variety of storage types (e.g. shape files, raster files, webscraping).

White Extremist Web Scrape: Frequency, Sentiments, and Topics

Scrape more than 5,000 comments automatically from an online White Supremacist forum discussing ideology/philosophy. Visualize the forum's activity in a variety of ways including: activity over time, most used words, most active users, sentiment analysis, and more.

Conduct sentiment analysis, and Latent Dirichlet Allocation topic modeling. Accessible via my website blog.

Democratic Repression: Responding in Kind?

- Restructure events data to country-month unit of analysis. Clean and restructure a variety of standard controls in political science research (regime type, economic indicators, conflict history, etc.) and join for full analysis.

- Estimate multilevel logistic models to model the relationship between domestic political dissent and state repression in democracies. I conclude that democracies repress as a response to political dissent, despite their political promise not to. Rough draft available via my GitHub page.

Terrorism and Spanish Elections: Does Terrorism Impact Support for the Central Government?

Estimate time series analysis to assess the impact of terrorism in Spain on support for the central government using machine coded events data and Spanish polling data.

Compare and contrast the autoregressive distributed lag (ADL) model and general error correction model (GECM) as part of a debate in the econometric political science literature.

Quantitative Experience

Software Proficiency: R, Stata, Python, SQL

Research Assistant - Dr. Elizabeth Menninga   Summer 2019

Develop a method of simulating social networks conditional on the observed network via bootstrapping to quantify uncertainty of network statistics in R.

Research Assistant - Dr. Bryce Dietrich   Summer 2019

Use millions of tweets to quantify 'otherization' of immigrants in the context of modern immigration events in R.

Research Assistant - Dr. William Reisinger, Dr. Marina Zaloznaya, Dr. Wenfang Tang   Spring 2019

Estimate regression and classification analysis on novel corruption survey data in China and Russia. I also created egonets out of embedded network vignettes in the survey.