

IAN RICHARD FERGUSON, M.A.

COMPUTATIONAL SOCIAL SCIENTIST

703.819.0646 | IRF823@stanford.edu | GitHub.com/IanRFerguson

PROFILE

My background in academic research has afforded me a rich computational toolbox to solve a range of technical problems. I have a demonstrated history exploring the mechanisms underlying political attitudes using nuanced and creative methodological approaches, and I am thrilled to channel these efforts to support a more equitable future.

EXPERIENCE

LAB MANAGER

Stanford Social Neuroscience Lab (Palo Alto, CA)
2020 - Present

- Research program uses supervised Machine Learning, NLP, and census data to assess relationship between status threat and online hate speech
- Developed neuroimaging analysis pipeline using object-oriented Python
- Developed JSON-to-CSV parsing software for ongoing EMA research (yielding over 104,000 observations from 2,200 participants)
- Facilitate scheduling, financial reporting, and RA hiring for lab of 10+ researchers

QUANTITATIVE RESEARCHER

Polarization and Social Change Lab, Stanford University (Palo Alto, CA)
2020 - Present

- Scraped and cleaned 30+ years of semantic data from the US Congressional records (over 47,000 observations)
- Research program uses NLP and granger causality modeling to predict voting trends as a downstream effect of moral language usage

FULL STACK DEVELOPER

Red Bridge Strategies (San Francisco, CA)
2022 - Present

- Multifaceted role using data to support leftist candidates and ballot measures
- Developed voter outreach web application using Flask, GeoPandas, SQLite
- Aggregated donor data using custom Voter Action Network parser

SKILLS

- **Python** (Pandas, NumPy, SciKit-Learn, NLTK, Spacy, Flask)
- **R** (dplyr, ggplot2, tidytext, MASS, lme4)
- **Database querying** (SQL)
- **Predictive and Inferential Statistics** (OLS and regularized regression, clustering, classification, decomposition, significance testing)
- **Machine Learning fundamentals** (hyperparameter tuning, variable selection, training and testing)
- **Collaboration** (Git, Replit)

EDUCATION

M.A. IN PSYCHOLOGY

New York University (2018 - 2020)

B.S. IN PSYCHOLOGY (MINOR IN BUSINESS)

Virginia Commonwealth University (2012 - 2015)