# ALEX BASS

hello@alexbass.me · Portfolio · Github · LinkedIn

#### **EDUCATION**

University of Virginia

Charlottesville, VA

Master of Science: Data Science

**Brigham Young University** 

Provo, UT

Bachelor of Arts: Political Science

#### **SKILLS**

Languages and Tools - proficient: Python, R, Bash intermediate: Spark, SQL, Tensorflow/Keras, Git, Docker Selected Coursework - Deep Learning, Bayesian Machine Learning, Big Data Systems with Spark, Linear Models for Data Science, Statistical Learning, Data Engineering, Linear Algebra, Econometrics I & II, Data Visualization, Programming in Python

### **EXPERIENCE**

**Dynata** 

Aug 2022-Present

Herndon, VA

Data Scientist, Marketing

- Delivered 30+ advanced analytical studies (MTA, drivers analysis, diff-in-diff) to high profile clients including 15+ to marketing teams at **Google and Meta**
- Built diff-in-diff and multi-touch attribution model codebase in Python(OOP) for Ad Data Science Team. This codebase has saved 100+ hours and brought over in \$2 million in revenue to date

**Internet Archive** 

Nov 2022-May 2023

Washington, D.C.

Intern, Data Science

- Solved entity resolution problem with Gradient Boosted Trees [here] linking sparse wikipedia references to Internet Archive Database References
- Implemented model in Python [here] which, given a wikipedia reference, will return a match in the Internet Archive Database along with a probability of matching.

**Morning Consult** 

Nov 2021-Aug 2022

Senior Data Analyst

Washington, D.C.

- Developed and automated wave-over-wave statistical tests on time series data in 17 tracker surveys of 5 countries
- Led project to build a Python Web Bot (Selenium) to automate generation of test cases in surveys, contributed this to data science code base (used by 60+ data scientists)
- Over 300+ requests, pulled data from API or large database into R, wrangled data using R, and output figures and tables

**Echelon Insights** 

April 2020-Nov 2021

Alexandria, VA

Research Analyst

- Led in modeling projects **predicting election turnout for entire** U.**S. in 2022**, phone response rates, etc.
- Wrangled, cleaned, weighted, or made presentations for 60+ survey datasets with R, SQL, and AWS
- Using R Shiny, built a codeless-crosstab tool for company's research team

## **Center for Elections and Democracy**

Dec 2018-April 2020

Research Fellow

Provo, UT

- Designed and executed multiple survey experiments in original research projects
- Mentored 60+ students in solving econometrics problems in weekly office hours
- Visualized data using R creating 50+ informative figures for AFS official report [here], news outlets, and professor's projects

### **SELECTED PROJECTS**

### Bayesian County-Level School Shooting Analysis

August 2022

• Compared and estimated several Bayesian Regression models with PYMC3 in Python. Ultimately, used **hierarchal negative binomial model** to predict shootings and make inferences about gun laws

## Political Message Detection and Likeability in Films

April 2020

- recieved award from Political Science department to fund a panel survey (n=1000).
- estimated linear regression and multinomial logit in observational study context and wrote paper [here] on findings.