# ALEX BASS

acbass49@gmail.com Portfolio Github LinkedIn

### **EDUCATION**



University of Virginia

Charlottesville, VA

Master of Science: Data Science
Brigham Young University

Provo, UT

Bachelor of Arts: Political Science

### **EXPERIENCE**



**Dynata** 

dynata Data Scientist, Marketing

(1yr 6mth) Aug 2022-Present Herndon, VA

- Led team (3 DS) to build a bayesian multi-touch attribution (PYMC) product measuring effectiveness of ad campaigns on brand lift surveys. Outputing lift curves, channel contribution charts, and a simulation tool for client delivery.
- Regularly deliver advanced analytical studies (diff-in-diff, dominance analysis, time series, MTA). In total, delivered over 100 of these studies to clients including Google, Meta, ServiceNow, Chickfila.



**Internet Archive** 

Intern, Data Science

(6mth) Nov 2022-May 2023

Washington, D.C.

- Solved entity resolution problem with Gradient Boosted Trees [here] linking sparse wikipedia references to Internet Archive Database References analyzing 15+ million records.
- 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** 

Senior Data Analyst

(10mth) Nov 2021-Aug 2022

Washington, D.C.

- Developed and automated wave-over-wave chi-squared tests on time series data in 17 tracker surveys of 5 countries
- Over 300+ requests, pulled data from API or large database into R, wrangled data using R, and output figures and tables
- 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)



**Echelon Insights** 

Research Analyst

(1yr 8mth) April 2020-Nov 2021

Alexandria, VA

- Led in modeling projects **predicting election turnout for entire U.S. in 2022** analyzing over 460 million records.
- 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

Research Fellow

(1yr 5mth) Dec 2018-April 2020

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

#### 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

### SELECTED PROJECT

April 2020

- wrote and fielded survey instrument (n=1000) after receiving funding award from Political Science department.
- estimated linear regression and multinomial logit in survey research context and wrote paper [here] on findings.