

# ALEX BASS

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## EDUCATION

University of Virginia

## Master of Science: Data Science

Charlottesville, VA

**Brigham Young University**

Bachelor of Arts: Political Science

Provo, UT

## 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

*Data Scientist, Marketing*

Aug 2022-Present

Herndon, VA

- 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**

*Intern, Data Science*

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
- 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

Nov 2021-Aug 2022

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

*Research Analyst*

April 2020-Nov 2021

Alexandria, VA

- 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**

*Research Fellow*

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

## SELECTED PROJECTS

## Bayesian County-Level School Shooting Analysis

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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.on findings.%20Project.pdf\{[here]\} on findings.%20Project.pdf%20Project.pdf\{[here]\} on findings.%20Project.pdf\{[here]\}