# ALEX BASS

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#### **EDUCATION**

University of Virginia

Charlottesville, VA

Master of Science: Data Science

**Brigham Young University** 

Data Scientist, Contractor

Provo, UT

Bachelor of Arts: Political Science

#### **EXPERIENCE**



Meta

(1mth) April 2024-Present

New York, NY

• Used causal inference methods to measure effectiveness of Meta's ad campaigns (e.g. diff-in-diff)



**Dynata** 

(1yr 8mth) Aug 2022-April 2024

Herndon, VA

dynata Data Scientist, Marketing

- 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, CVS, Chickfila, and AT&T.



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**

Data 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

#### **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 PROJECTS**

### Live Dashboard - 2024 US Pres. Election Forecast

January 2024

- Estimate daily a heirarchal bayesian regression model to generate probabilities of election outcomes using latest polls
- Created a live data pipeline with Github Actions and Python > Live Quarto Dashboard

## Star Wars: Political Messages and Likeability

January 2020

- Awarded \$1500; wrote, fielded, analyzed original survey research project with Prolific
- Observational study: answered research questions using multiple linear regression and multinomial logit regression.