

## Relevant Experience

### WARREN FOR PRESIDENT

*Michigan Get Out The Vote Data Lead* (February 2020 – March 2020)

*Iowa Deputy Data Director* (June 2019 – February 2020)

- Built a program that emailed online signups to organizers twice a day, within hours of the initial sign-up. The workflow included a Google Sheets data entry system which moved data into VAN using the Google Drive and VAN APIs. This program allowed organizers to be in touch with local online supporters within 6 hours of initial campaign contact. The workflow was replicated by national HQ and deployed to other states.
- Engineered a data pipeline from MobilizeAmerica to VAN specifically for Get Out The Caucus (GOTC) events for improved flexibility and to match in-state data standards. The pipeline created and updated 360 GOTC events in MobilizeAmerica using the MobilizeAmerica and VAN APIs. The workflow was replicated by national HQ and deployed nationally.
- Built a workflow for automatically creating a Google Sheets turf tracker for 120 staging locations. The workflow updated the prioritization of each precinct, allowing senior staff to re-prioritize precincts during GOTC.
- Built several reports for the IA relational organizing program and volunteer pipeline in D3.js on Civis Platform, Michigan's Percent to Goal (PTG) report, and Iowa's GOTC soft report, based on data submitted by every staging location director after every shift and which calculated flake rates and reshift rates by location and shift.
- Created a program that emailed organizers every day with data on their progress to goal for GOTV shifts recruited and a list of their unclosed shifts. The system also sent region-level summary emails to regional organizing directors.
- Wrote SQL to pull lists for email and texting mobilization, and Python scripts for retrieving nearest event.
- Built Google Apps script in JavaScript for sending email notification to data team and other senior staff when Google form was submitted for list request.
- Created reports in Tableau, helped to administer VAN, answered data tickets, trained organizers on VAN.

### PRECISION STRATEGIES

*Data Analytics Associate* (August 2018 – May 2019)

*Data Analytics Intern* (June 2018 – August 2018)

- Engineered client dashboard web application using AngularJS, Express, and Vega, a D3.js-based library.
- Engineered a new, faster data pipeline for a client, primarily in Python and Pandas. Implemented new data definitions and wrote explanations for a non-technical audience and technical documentation for the client tech team.
- Automated the writing and running of standard SQL queries using the Civis Analytics API in Python.
- Scripted election night reporting programs in Python for key races, scraping data from state websites.
- Supported the DNC tech community team with VAN administration, model uploads, and Vertica help.

### HILLARY FOR AMERICA

*Data Analytics Intern (Organizing Analytics Subteam)* (August 2016 – November 2016)

- Programmed a web scraper in Python to correct about 230 false NC polling location addresses in our database just in time for Election Day, so that they could be displayed on the campaign website.
- Created a Python script to pull RealClearPolitics polling averages from any period into a spreadsheet.

## Education

### HARVARD UNIVERSITY

A.B., Computer Science Degree. Graduated May 2018.

Transferred from studying politics and economics at Oxford University. Took a semester off to intern on Clinton campaign.

## Skills

Proficient in HTML, CSS, D3.js, Tableau, VAN, SQL and programming in Python and JavaScript. Familiar with Selenium, Pandas, Pygsheets, BeautifulSoup, and Civis Python packages. Used AngularJS and Express. References upon request.