## **EDUCATION**

Columbia University New York, NY

Bachelor of Arts in Political Science-Statistics

Expected Graduation, May 2023

• GPA: 3.93

 Relevant Coursework: Applied Data Mining, Applied Linear Regression, Political Psychology, Experimental Research, Global Urbanism, Organizing Innovation, Data Justice, Categorical Data Analysis, Quantitative Political Research, Statistics for Behavioral Scientists, Applied Statistical Methods, Shrinking Cities

### PROFESSIONAL EXPERIENCE

### What Works Cities-Results for America

Washington, DC

Certification Intern

June 2022 - Present

- Review 50+ city's data policies, practices, and analyses to provide a best practices guide for data-smart cities
- Analyze various documents and policies from different cities to determine whether they meet specific criteria for the What Works Cities' City of Excellence designation
- Communicate with city officials about how to better steward, manage, organize, and communicate data with public stakeholders
- Support the expansion of city data certification to include Canadian and Latin American cities
- Review individual city performance goals to determine if data-driven policies and research were being utilized to further city initiatives

Urban Institute Washington, DC

Nonprofits and Philanthropies Data Science Intern

June 2022 - August 2022

- Independently led the development and implementation of a web-scraping R package to gather data from thousands of nonprofit and philanthropy websites
- Created an interactive map to plot the locations of nonprofits and philanthropies in the United States to study their relationship with local health and social outcomes
- Worked collaboratively to conduct analyses regarding the reflectiveness of nonprofit boards on the communities that they serve in terms of race, gender, and income
- Worked cross-functionally with several teams to support ad hoc research projects analyzing the effects of increased social capital on community health outcomes

# **Two Rivers Public Health Department**

**Kearney, NE (Remote)** 

Data Analyst and Researcher

May 2020 - July 2022

- Performed qualitative and quantitative analyses regarding access to healthcare in R and Stata
- Generated and published visualizations in R and Tableau for technical and non-technical audiences
- Entered, cleaned, and managed large quantities of data in R and Excel while working with set privacy guidelines
- Researched the spread and trends of COVID-19 within low-income and minority communities
- Defined departmental policies for data collection, ethics, and integrity and communicated them to the public

Urban Green Council New York, NY

Research Intern

September 2021 - May 2022

- Examined raw data and conducted analyses to support ongoing reports and novel research on urban sustainability
- Utilized open data sources from New York and other entities to monitor trends in urban energy use
- Modeled scenarios regarding the reduction of building emissions and the electrification of cities
- Presented results of analyses to guide public policy decisions regarding sustainability in urban settings
- Provided visualizations for data storytelling regarding energy use in urban environments during the pandemic

## Columbia University, Department of Statistics

New York, NY

Public Interest Technology-Data Science Corps Intern

June 2021 - August 2021

- Parsed PDF documents in R and Python to extract wide scope of community health data and outcomes of New York City communities
- Conducted analyses, communicated research, and prepared visualizations for public policy presentations
- Researched independently and with small teams to provide project managers with needed data and analyses

## **Project Guardianship**

New York, NY

Data Intern

January 2021 - May 2021

- Cleaned and standardized datasets and prepared data reports for Data and Policy Manager
- Developed novel scripts in R to analyze healthcare benefits of clients and clean existing data frames
- Reviewed data collection and storage methods of information across multiple departments

### **RESEARCH & PROJECTS**

# Hues and History: A Journey of Art through Color, Time and Space (Ongoing)

New York, NY

Data Art Project for NYC Open Data Week

Present

- Art project scraping 30,000 + images from Metropolitan Museum of Art's API and extracting top colors
- Combining descriptions, regions, and galleries to present a history of art, color, and time through the Met

### **Redlining and Police Killings**

New York, NY

Data Visualization Project

November 2021

- Series of maps overlaying policing killings over HOLC Redlining Maps of major US cities
- Use of historical data and cartography to visually represent systemic racism

## How a Global Pandemic Shifted NYC's Energy Use

New York, NY

Report with Urban Green Council

April 2022

- Research report using open data from New York City to analyze how multifamily housing and offices changed their electricity consumption throughout the course of the COVID-19 pandemic
- Analyzed the relationship between income and location on shifting energy consumption in New York City

{MetBrewer} New York, NY

R Package

January 2022

- Color palettes for data visualization based around artwork at the Metropolitan Museum of Art in New York
  - Over 50 color palettes were created, with many being colorblind-friendy and more accessible
  - Currently over 13,000 downloads and used in several scientific publications

# Take it to Twitter: Social Media Analysis of Members of Congress

New York, NY

Medium

August 2021

- Conducted sentiment analysis on over one million tweets from members of Congress to examine policy views
- Used natural language processing methods in R to monitor the frequency of policy issue mentions
- Provided a guided tutorial for running text cleaning and sentiment analysis in R

## First One-Hundred Days COVID-19 Report

Kearney, NE

In collaboration with Dr. Aravind Menon, Two Rivers Public Health Department

August 2020

- Government report for public consumption regarding the spread of COVID-19 in the district's jurisdiction
- Conducted qualitative and quantitative analysis to examine what demographics were affected by COVID-19
- Provided transparency of data collection and storage methods to generate public assurance

### **SKILLS**

Coding Languages and Skills: R (Advanced), Excel (Intermediate), Tableau (Intermediate), SQL (Beginner) R Packages and Skills: {ggplot2}, {tidyverse}, {shiny}, {lubridate}, {MASS}, package development Analysis Skills: linear and logistic regression, random forests, data wrangling, data visualization, machine learning, text analytics, natural language processing, STM and LDA models, Twitter analytics, geospatial analysis, geospatial mapping