# CLAIRE BOYD

## **CAREER OBJECTIVE**

An emerging technologist pursuing a master's in computer science looking to gain mission-driven, data engineering experience.

#### TECHNICAL SKILLS

Languages: python (pandas, re) | RStudio (tidyverse, tidycensus) | SQL (sqlite, PostgreSQL) | git & GitHub | HTML/CSS

Software: Visual Studio Code | Tableau Public | Microsoft Office Suite | G-Suite | NVivo | Trello | Slack | Asana

Other Skills: Report Writing | Project & People Management | Grant & Proposal Writing | IRB Documentation & Compliance

## **EDUCATION**

University of Chicago Chicago Chicago, IL

Master of Science in Computational Analysis and Public Policy

Expected June 2024

• Course Topics: Object-Oriented Programming, Web Scraping, Data Storage, Relational Databases, Data Structures, Machine Learning, Data Cleaning & Visualization, Text Mining, Causal Inference, Program Evaluation, Data Pipelines

## University of North Carolina at Chapel Hill

Chapel Hill, NC

Bachelor of Arts, Political Science and Global Studies (Robertson Scholar - Full Merit Scholarship)

May 2018

PROJECTS

available on 🕥

- <u>COVID-19 Online: How people interacted with government websites during the pandemic</u> (March 2023): Uses a complete data pipeline (from collection to visualization) to explore web traffic to HHS websites during the pandemic [public code]
- <u>Scraper for Chicago Maps Archive</u> (Feb 2023): Reconfigures data made publicly available by the Chicago History Museum to help process and digitize the maps for public use by University of Chicago Library's Preservation Departments [public code]
- Which presidential candidate gave this speech? (Jan 2023): Uses a Markovian modeling system to detect patterns in speeches, allowing users to pass get probabilistic predictions on speakers from unidentified speeches [code available upon request]

#### **EXPERIENCE**

### **Cook County Assessor's Office**

Chicago, IL

Data Intern, Office of Data Science

March 2022 - Present

- Adds new features and/or functionality to <a href="mailto:ptaxsim">ptaxsim</a>, a new open-source R package property tax assessment system
- Creates, updates, and validates code in an AGILE programming environment, in collaboration with other data analysts

Urban Institute Washington, DC

Research Associate, Office of Race and Equity Research

November 2021 - July 2022

- Served as a co-principal investigator and project manager across 5 projects, partnering with senior researchers to identify key research questions, develop a cohesive methodology, conduct comprehensive analyses, and present findings directly to funders
- Conducted comprehensive data analysis in R using sophisticated matching methods to link administrative federal data to publicly available census estimates for racial equity analysis. These analyses are referenced in public Equity Action Plans
- Created interactive and data-driven Microsoft Excel dashboards to help program officers choose representative grantee cohorts, keeping in mind characteristics such as race and ethnicity of leadership, geography, and budget size

Research Analyst, Center on Nonprofits and Philanthropy

January 2021 - November 2021

- Streamlined quantitative (R) and qualitative (NVivo) data analyses on nonprofit-specific data for 6 philanthropic and federal program evaluations, making comprehensive, concise visuals to explain complex results
- Served as interim manager for the National Center for Charitable Statistics (NCCS), which included: teaching 10+ staff how to use a Python program to validate raw IRS 990 data, co-authoring the Nonprofit Sector in Brief annually

Research Assistant, Center on Nonprofits and Philanthropy

August 2018 - December 2020

- Led sample development, data cleaning, analysis and report writing for Salesforce.org's 3rd annual <u>Global Nonprofit Trends</u> <u>survey</u> (of over 1,600 responses) while navigating technical restraints due to General Data Protection Regulation compliance
- Spearheaded data aggregation, analysis and visualization for the <u>Citi Community Progress Makers Fund</u> 2019 annual impact report, streamlining data input from 70+ organizations to develop impact statements for the cohort overall

### **CIVIC ENGAGEMENT**

- Data, Ethics & Policy (Founding Board Member): Responsible for fundraising and project managing a Fall 2023 conference exploring topics such as: algorithmic transparency, data privacy & ownership, and bias & fairness in computing.
- <u>ChiHackNight</u> (Member): Attends weekly meetings focused on making Chicago more just, equitable, and transparent. ChiHackNight is a group of technologists, policy wonks, and curious citizens creating civic tech solutions to local problems.
- <u>South Side Civic</u> (Participant): Engaged in the annual Civic Scope-a-thon, which brings together civic organizations and students to learn about civic hacking. Partnered with <u>South Shore Works</u> to create data structures to track referrals to resident services.

### **RELEVANT PUBLICATIONS**

J. Axelrod, C. Boyd, S. Fu, K. Ramos, and C. Balakrishnan. <u>Lessons from Local Leaders: How Federal Agencies Can Help Ensure Data-Driven and Equity-Centric Infrastructure Investment</u>. Urban Institute. August 2022

Schwabish, J, A. Narayanan, C. Boyd and L. Betzendahl. Visualizing Vaccinations. Urban Institute. May 2021

Boyd, C., L. Doyle, and M. Menezes. Keeping Youth of Color Connected in Texas Public Schools. Urban Institute. January 2021