Shut it down!

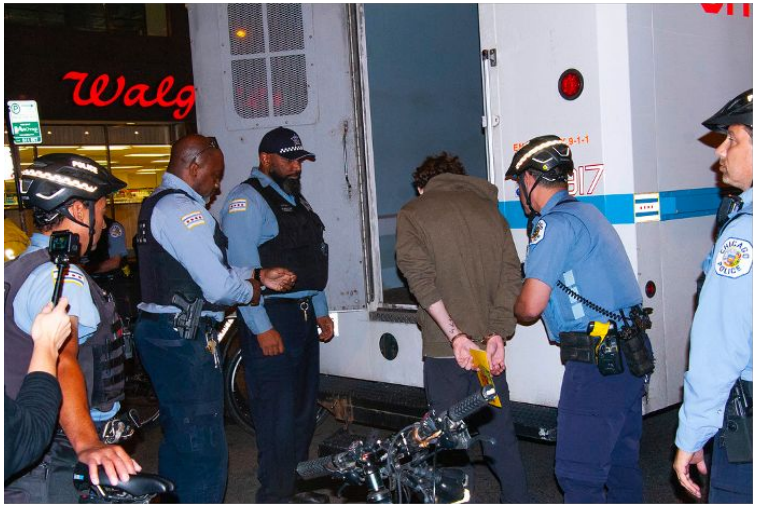
A dashboard and data repository of ICE immigrant detention/enforcement data

Background

The US immigrant detention system has grown 5-fold in the past 2 decades.

Research shows detention causes serious and long-term harm to those who are detained, their families, and the broader communities.

Data is necessary to drive actionable policies.



As activists push forward campaigns to close specific facilities, our inability to predict the impact of shifts in detention capacity presents real problems.

ICE detention data is not easily accessible. After years of litigation under FOIA, the University of Washington Center for Human Rights (UWCHR) is now obtaining the records that will make it possible to conduct the first national study of the impacts of detention on communities.

https://www.americanimmigrationcouncil.org/research/landscape-immigration-detention-united-states

Data

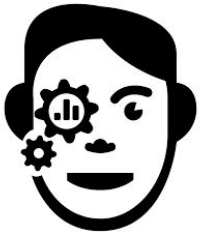
Data: courtesy of the University of Washington's Center for Human Rights

Through numerous FOIA requests and litigation, UW's Center for Human Rights has obtained dozens of datasets spanning roughly 2010-2020 related to ICE immigrant detention and enforcement records from across the US. Datasets include variables on detention facilities, law enforcement, and bond rates.

Challenge: Most of the datasets are incomplete, messy, and do not include codebooks. Some detective work and a lot of data cleaning + manipulation is necessary to properly interpret and analyze the data.

aor	apprehension_date	apprehension_method	apprehension_landmark	operation	processing_disposition	citizenship	gender	id
SPM	10/1/15	Probation and Parole	OMAHA NE NON-FUGITIVE ARREST		REINSTATEMENT OF DEPORT ORDER I-871	MEXICO	Male	0
CHI	10/1/15	Non-Custodial Arrest	CHI GENERAL AREA, NON-SPECIFIC		Bag and Baggage	GUATEMALA	Male	1
LOS	10/1/15	CAP State Incarceration	CALIFORNIA MENS COLONY WEST		Other	LAOS	Male	2

Use cases



Researchers:

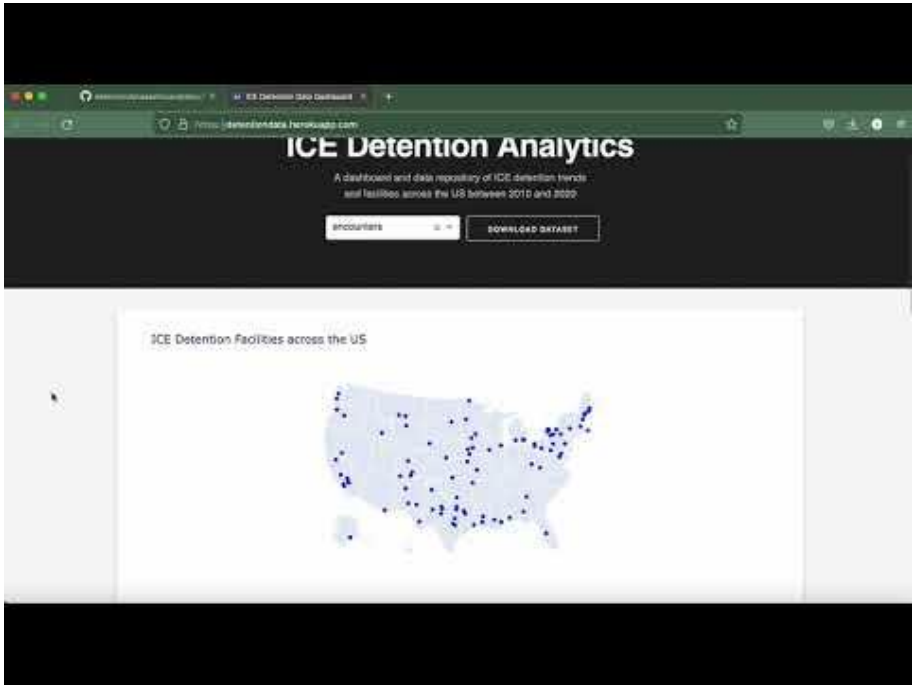
- Trends in immigrant detention enforcement and facilities over the last 10 years to answer questions about the impact of shifts in detention on communities
- Visualize certain trends and pull out data so they can use/work on it on their own without having to go through ICE

Policymakers/Advocates

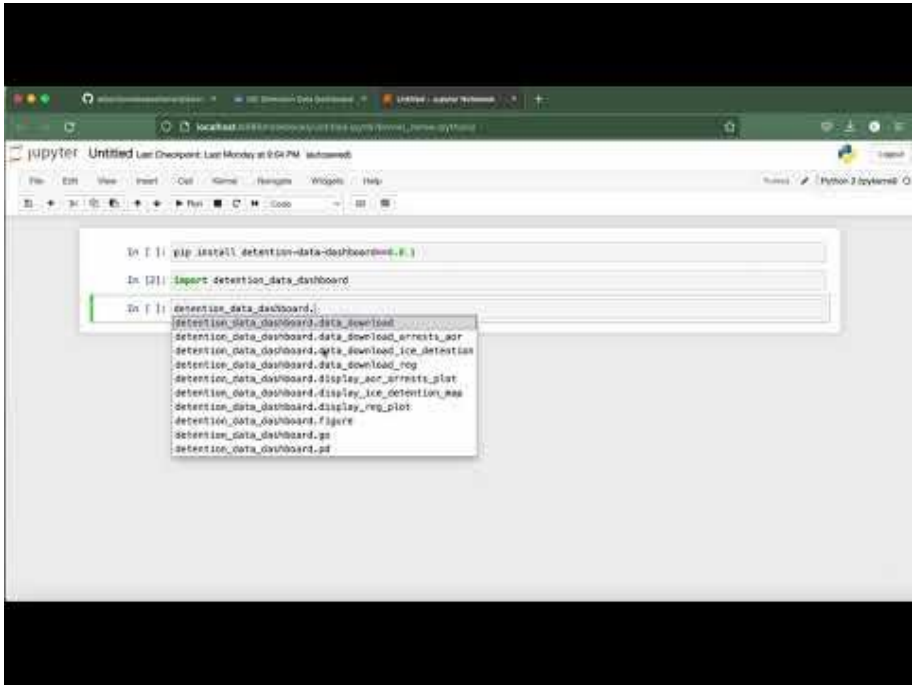
- Visualize trends in order to get summary level statistics in order to make broad policy decisions
- A way to output visualizations
- Easy drop down menus to change relevant variables (years, citizenship, various demographics)
- Less technical, clear and easy to use interface without having to go through ICE and do the analysis themselves

Demo

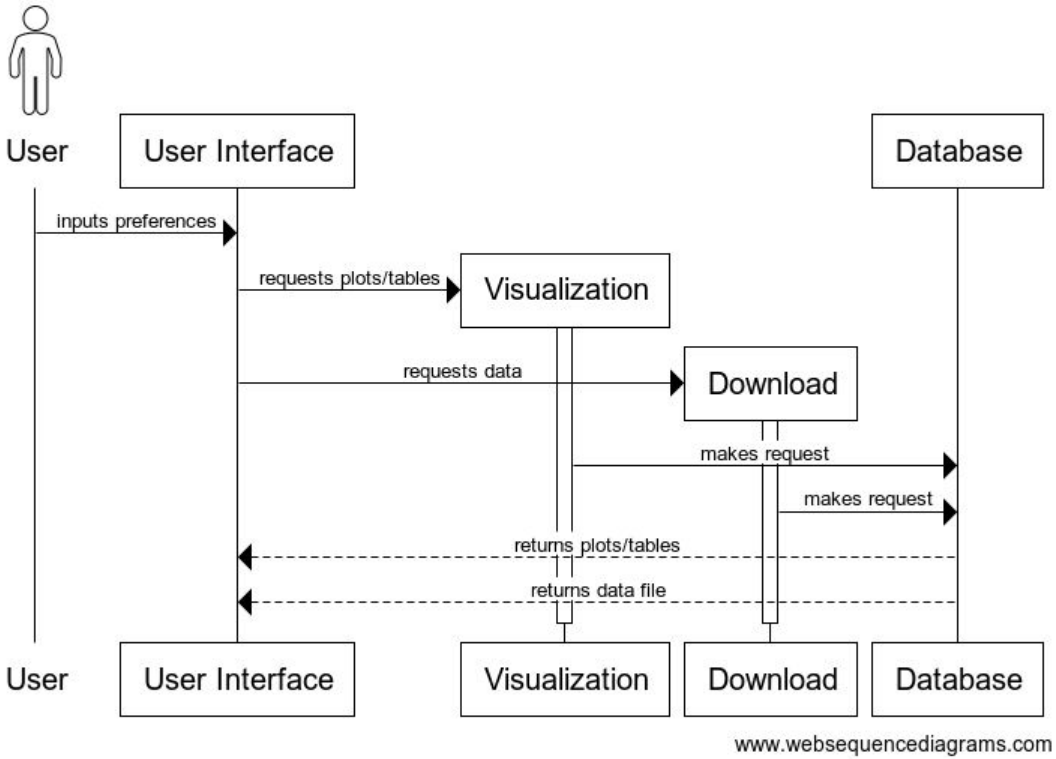
Dashboard



pip install



Design


User
User Interface
Database
inputs preferences
requests plots/tables
Visualization
requests data
Download
makes request
makes request
returns plots/tables
returns data file
User
User Interface
Visualization
Download
Database
www.websequencediagrams.com

Project structure

```
.
├── LICENSE
├── Procfile
├── README.md
├── app.py
├── assets
│   └── style.css
├── data
├── detention_data_dashboard
│   ├── __init__.py
│   ├── __pycache__
│   │   ├── __init__.cpython-310.pyc
│   │   ├── data_download.cpython-310.pyc
│   │   └── figure.cpython-310.pyc
│   ├── data_download.py
│   ├── data_exploration
│   ├── figure.py
│   └── tests
│       ├── __init__.py
│       ├── test_data_download.py
│       ├── test_figure.py
│       └── test_images
├── doc
│   ├── software_design.md
│   └── tech_reviews
│       ├── Tech\ Review\ -\ Web\ Development\ Apps\ for\ Python.txt
│       └── Technology\ Review\ -\ Dashboards\ in\ Python.pptx
├── environment.yml
├── requirements.txt
├── runtime.txt
└── setup.py
```

Lessons learned & Future work

1

The dashboard itself is lacking in terms of visualization because the data still needs a lot of work (massive amounts of data that is messy and missing in parts)

2

Budget time for cleaning data:

- Accessing data is not enough. Having **cleaned and available data early** on allows for the initial software design to be done with confidence.

3

Communicate clearly about roles and responsibilities using initial software design:

- **Clear communication** around the design allows for the project to leverage the benefits of test-driven development