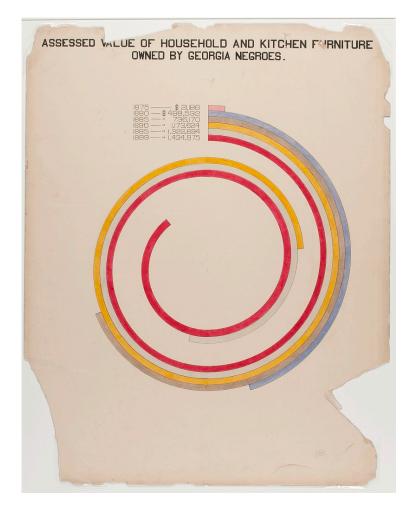
### What should students know about data?

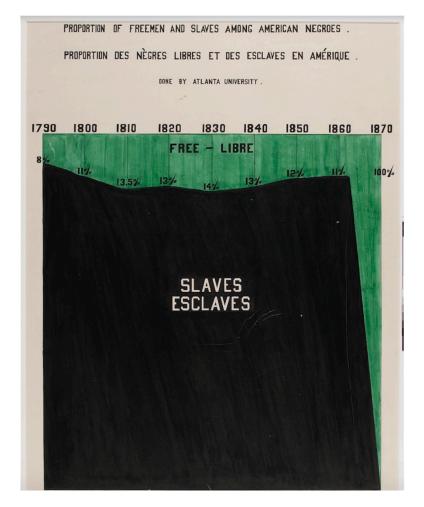
### Data are a double-edged sword.

- Data can be used for powerful purposes. Visual displays of data can have emotional impact.
  - Data can purposely or "inadvertently" be used to oppress, especially in the context of machine learning
- "Appropriate skepticism" is a useful attitude towards data.
  - "Always ask about measurement details: "when?", "who?", "how?", "where?" and possibly "why?"

#### W. E. B. Du Bois's "Data Portraits" (1900)







# **Visual Impact: The Mueller Report**

1	The Mueller Report Che Ment Jork Cines	

# **Data 4 Black Lives**

Since the advent of computing, big data and algorithms have penetrated virtually every aspect of our social and economic lives. These new data systems have tremendous potential to empower communities of color. Tools like statistical modeling, data visualization, and crowd-sourcing, in the right hands, are powerful instruments for fighting bias, building progressive movements, and promoting civic engagement.

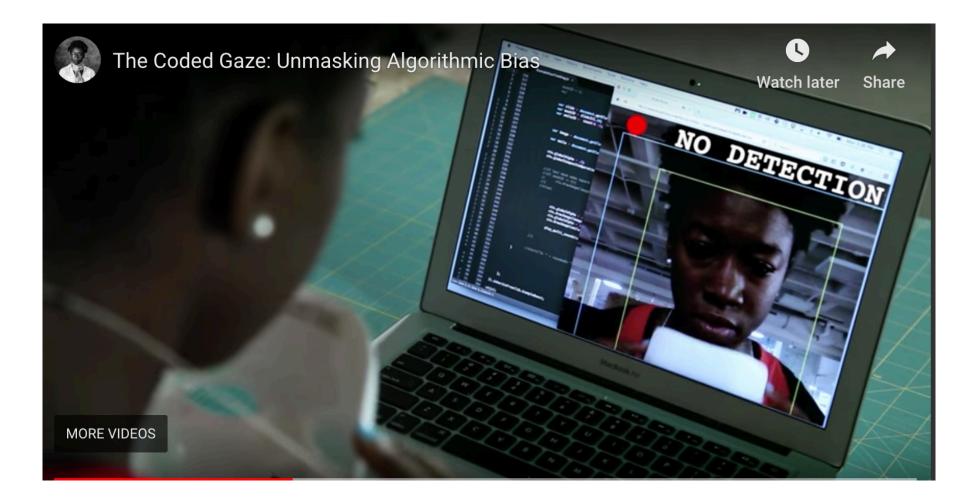
But history tells a different story, one in which data is too often wielded as an instrument of oppression, reinforcing inequality and perpetuating injustice. Redlining was a data-driven enterprise that resulted in the systematic exclusion of Black communities from key financial services. More recent trends like predictive policing, risk-based sentencing, and predatory lending are troubling variations on the same theme. Today, discrimination is a high-tech enterprise.

Data for Black Lives is a group of activists, organizers, and mathematicians committed to the mission of using data science to create concrete and measurable change in the lives of Black people.

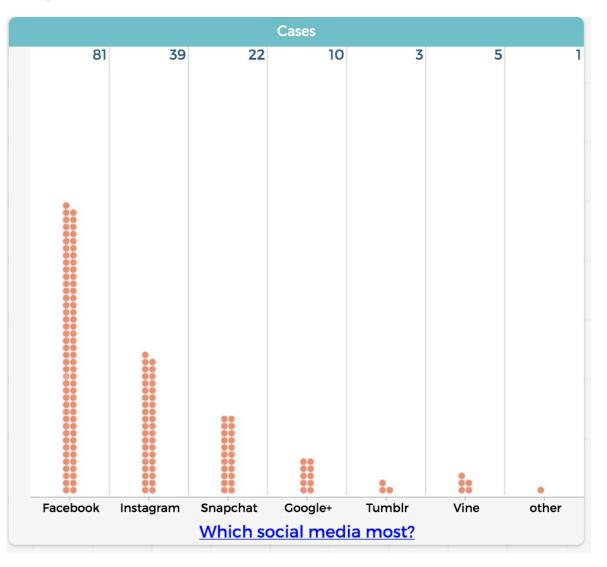
## **Algorithmic Justice League**

- Mission:
  - Highlight Algorithmic Bias
  - Provide Space for people to voice concern about coded bias
  - Develop Practices for Accountability During Development of Coded Systems

# Joy Buolimwini



## Data Clubs: promoting appropriate skepticism



Which of these social media do you use MOST often?

## Data Clubs: probing more deeply

