#ref #ret

%%- n: usa foreing intel survelance - j: edward snowden, apple data collection. consumer notification! - d: digital polical ads + tracking - m: social media taking data in general - h: human ml modeling %%

# 1 | Page o' notes

#### 1.0.1 | Machine learning broad level implications on privacy

- ML requires big data
  - machine learning has driven us into the "information age"
    - cause of most of these issues
  - getting lots of info  $\rightarrow$  invading privacy, generally
- ML can break privacy without explicit data
  - ML can de-anonymize anonymous activities
    - ML based tracking systems make anonymity hard
    - hashing ISN'T good enough
  - same thing can be done even without ml
    - location tracking easily de-anonymized by simple cross reference
    - •
- ML can construct human models
  - fundamentally about simulation intelligent behavior
  - ML model of how you think and act
    - viewed as creepy
  - if it could predict your thoughts, what then?

## 1.0.2 | Regulation!

- FTC (federal trade commission) coming down hard
  - hitting Facebook, google, ect.
- CCPA, California consumer privacy act
- GDPR, General Data Protection Regulation
- how effective is regulation?
  - can we really prevent it?
  - one of the arguments: if you make data collection illegal, only criminals will have the data

## 1.0.3 | **Rights**

- right to be forgotten
  - opt out law by the consumer
  - is this a right?

- right to our data, as outlined in CCPA
  - again, really a right?
- individualize experience moral?
  - amazon adjusting prices,
  - insurance companies not accepting
  - ect.

#### 1.0.4 | Flipside

- if privacy-preserving techniques ultimately fail,
  - then what?
- ML does a lot of good
  - though the individual might not want to share medical data,
  - that same data on the large scale could save countless lives
- garbage in, garbage out + black box
  - not. good.
  - especially when Al will dominate decision making and analysis.
- forced to give data by tragedy of the commons
  - you want ml networks to portray your demographic accurately,
  - and if you don't give data, it won't. In a world dominated by ml,
  - giving your data becomes necessity
- forced to give data by economic necessity
  - where data collection is truly opt out, services replace it with paid
  - economically worse off will be more likely to give data
  - skews data collected?