### CS 121

#### Our Digital World: Privacy & Anonymity

February 12, 2018

### Security & Privacy

• Security:

• Privacy:

What data do we have or produce that is valuable?

To whom?

• Anonymity:

#### • Why do we value each?

# Who?

• Big Brother

• Little Brother

### Data

• How do we give data away?

- What data do we give away willingly?
  - What do we get in return?

• What data do we not realize we give away?

### Privacy threats

• Web Browsing Tracking

Purchase/interaction Tracking

Phone App Tracking

### Strava

- https://labs.strava.com/heatmap
  - What does this map tell us?
    - look at the full earth map
  - see link on class schedule web page
    - Forest Grove
  - What concerns were raised in the articles?
    - Who shoulders the blame?

# Phone Apps

- Open play.google.com
  - search for "Brightest Flashlight Free"
  - What permissions does this app require?

 "Updates to Brightest Flashlight Free may automatically add additional capabilities with each group."

# Your Phone

- What permissions does your favorite app require?
- Do these seem reasonable?

### Define

Cookie

• Beacon

# **Privacy Tester**

- Open Chrome
  - Login to BoxerMail
- Visit the following web page, click on a link or two:

cnn.com oregonlive.com facebook.com pacificu.edu espn.com

https://panopticlick.eff.org/

two other favorite websites

# What does Google know about you?

- Visit the following page:
  - http://adssettings.google.com
  - login with your PUNetID account or personal Google account
- How well does Google know you?
  - is the age range correct?
  - gender?
  - Do the categories fit you?

# My Office Computer: Google

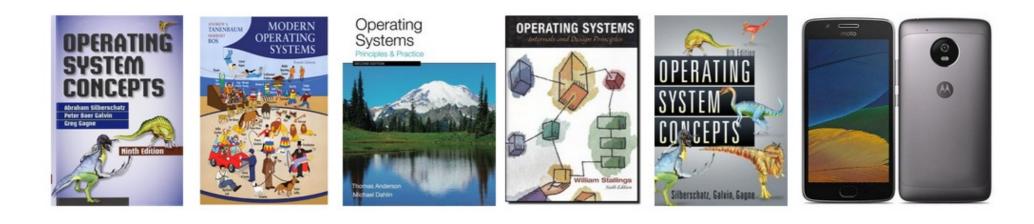
Your categories

Below you can edit the interests and inferred demographics that Google has associated with your cookie:

Category	
Arts & Entertainment	<u>Remove</u>
Arts & Entertainment - Humor	Remove
Computers & Electronics - Computer Security - Network Security	Remove
Computers & Electronics - Networking - Network Monitoring & Management	Remove
Computers & Electronics - Programming	Remove
Computers & Electronics - Programming - C & C++	Remove
Computers & Electronics - Programming - Development Tools	Remove
Food & Drink - Candy & Sweets	Remove
Internet & Telecom	Remove
News - Weather	Remove
Demographics - Age - 35-44 💿	<u>Remove</u>
Demographics - Gender - Male 💿	<u>Remove</u>

### Amazon

• What other class am I teaching this semester?



Recommendations for You, Chadd

# How are you tracked?

- https://panopticlick.eff.org/
- bits of identifying information
  - lower is better
- one in x browsers have this value
  - lower is better
  - which number is highest?

•Install Privacy Badger and re-run the test

# Activity

 Find one piece of software to allow you to manage your cookies. Provide download link and brief description of how to use it, what the software does.

# Activity

- Find one piece of software to manage, hide, stop, or confuse web trackers/beacons in your web browser
  - Look for a Firefox or Chrome Extension

# Wednesday

- Read three articles posted on class web site
- Questions (answer in your blog):
  - What are two advertised uses for Alexa, Siri, or Google Home?
  - Explain why someone might choose to use on of these systems.
  - Do you use one of these systems?
  - Explain briefly some privacy concerns here.
    - Consider: Where is the voice recognition done?
    - Why might company posted documentation be wrong?
    - What risks can you think of?

# Monday

- Read the three articles online
- Smartphone use: pro/con
- On your blog:
  - Summarize your reaction to the Cons article.
  - How do you see people outside of your age group (sibling, parents, grandparents, etc) using the smart phone differently than you?
  - How concerned are you with your phone usage?
  - Often do you turn off your phone completely?