



## CS121: Our Digital World

Privacy

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Big Brother/ Little Brother

# + 1984 Today?

- Security cameras
- Permanent surveillance
- One camera for every dozen people in the UK
- Not just cameras, what other data is collected, stored, and analyzed?

# + Collected Information

- Cell Phone Companies:
  - Numbers you called
  - Where your phone has been
  
- Credit Card Companies:
  - Where you spent money
  - What you spent it on
  
- Bank:
  - Keeps electronic records of transactions
  - Why?



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Targeted Advertising

# + Loss of Privacy

- Not forced upon us; we accept it
- What do Google and Yahoo! know about you?
  - <http://www.google.com/privacy/ads/>
  - [http://info.yahoo.com/privacy/us/yahoo/opt\\_out/targeting/](http://info.yahoo.com/privacy/us/yahoo/opt_out/targeting/)

# + Activity: Advertising Online

- Examine Yahoo! and Google's advertising privacy policies and answer the following:
  - What are interest-based ads?
  - What is a cookie?
  - Can you opt out of interest-based ads? If so, how?
  - List five ways in which Ads are targeted:
    - 1.
    - 2.
    - 3.
    - 4.
    - 5.

# + Targeted Advertising

- <http://online.wsj.com/video/how-advertisers-use-internet-cookies-to-track-you/92E525EB-9E4A-4399-817D-8C4E6EF68F93.html>



# + Activity: Website Trackers

- Go to: <http://blogs.wsj.com/wtk/>
- Find your frequently used web sites and look at how many tracker files are generated

# + Targeted Advertising

- How do you feel about targeted advertising?
- List some pros:
  - 
  -
- List some cons:
  - 
  -

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Anonymity



# + How anonymous are you online?

- Mr. Owad wrote a simple piece of software that allowed him to download public wish lists that Amazon.com customers post
- These lists usually include the name of the list's owner and his or her city and state.
- Mr. Owad was able to download over 250,000 wish lists over the course of a day. He then searched the data for controversial or politically sensitive books and authors, from Kurt Vonnegut's "Slaughterhouse-Five" to the Koran. He then used Yahoo People Search to identify addresses and phone numbers for many of the list owners.
- Mr. Owad ended up with maps of the United States showing the locations of people interested in particular books and ideas, including George Orwell's "1984."

# + Connecting the Dots

- Can data be de-identified?
- Latanya Sweeney at MIT identified Governor Weld from health insurance information that:
  - DID NOT include name, address, social security number, and telephone number.
  - DID include gender, birth date, and zip code.
- Who made a mistake here?

# + Privacy

- What is or should be private?
  - Name?
  - Address?
  - Zip code?
  - Birth date?
  - Driver license number?



Cameras Everywhere!

# + Vigilante Justice

- We are all little brothers
- Examples:
  - Captured perpetrator of assault on Boston public transportation.
  - Korean lady who let her dog defecate on the subway.





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GPS & RFID

# + GPS

- Global Positioning System that is a space based navigation system.
- Used in:
  - Map making
  - Navigation
  - Surveying
  - Clock synchronization
  - Cell phones

# + Activity: RFID

- Technology used by companies to track merchandise
- Used at toll roads and bridges:
  - Example: Nelson Gross
- Go online and find answers to the following:
  - What is RFID?
  - Give 4 examples of where it is used.
  - What are the controversies surrounding the use of RFIDs? Give examples.



# Privacy Policies

# + Activity: Pacific University Privacy Policy

- Did you know that Pacific University has a privacy document.
- Answer the following:
  - Under what conditions are exceptions to the privacy policy made?
  - Can users expect privacy of their electronic communication?

# + Activity: Google

- Google recently changed its privacy policy, which caused an uproar in the media.
- Do some research:
  - Summarize the changes to Google's privacy policy.
  - Where do you stand with regards to the changes?
  - How can someone

# + References

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