

# CS 100: Privacy

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Week 13

# Logistics

## HW 6 due next Friday

- ▶ Machine Learning Problems
- ▶ Automation
- ▶ 2 Security Upgrades

## Mini-Exam 4

Today

## Reading

- ▶ Pattern: Ch 8 (Machines that Learn)
- ▶ Pattern: Ch 9 (Beyond Engineering)

## Today

Privacy wrap-up

## Online Privacy in The Past



Peter Steiner, from page 61 of July 5, 1993 issue of The New Yorker,  
(Vol.69 (LXIX) no. 20)

# Reflect

## Participation: What is private?

- ▶ List things which you consider private information
- ▶ Meta-data: "I have a credit card" vs "My CC number is. . . "
- ▶ Create **2 lists**
  - ▶ Digital private (stored on some computing device)
  - ▶ Non-digital private (pretty sure it's not stored)
- ▶ 5 min to think/write
- ▶ Share as group

# Watch

[Hot on Your Trail: Privacy, Your Data, and Who Has Access to It](#)

As you watch, alter anything on your list that isn't as private as you thought

# Online Privacy in The Present



## It May Help

Find interesting people, learn things, get deals, ease your life

Information will be gathered on you continuously for the rest of your life. Examples

- ▶ Web Visits
- ▶ Purchases/Finances
- ▶ Personal Identifiers
- ▶ Physical Location

It will be mined for interesting patterns: [Beer and diapers](#)

## It May Hurt

Loans denied, jobs lost, relationships ruined, court cases lost

## The Target

*"My daughter got this in the mail!" he said. "She's still in high school, and you're sending her coupons for baby clothes and cribs? Are you trying to encourage her to get pregnant?"*

*Sure enough, [the mailer] was addressed to the man's daughter and contained advertisements for maternity clothing, nursery furniture and pictures of smiling infants. The manager apologized and then called a few days later to apologize again.*

*On the phone, though, the father was somewhat abashed. "I had a talk with my daughter," he said. "It turns out there's been some activities in my house I haven't been completely aware of. She's due in August. I owe you an apology."*

...

*Mathematicians are suddenly sexy. . . "We'll be sending you coupons for things you want before you even know you want them."*

[NYT: How Companies Learn Your Secrets](#), By Charles Duhigg, February 16, 2012

## A cutting question

If people value privacy so much why do they put so much personal information online?<sup>1</sup>

[http://www.youtube.com/watch?v=juQcZO\\_WnsI](http://www.youtube.com/watch?v=juQcZO_WnsI)

### Questions

- ▶ Should employers have access to your Facebook/Social Network profile?
- ▶ Would you *friend* a potential employer if asked to do so for an interview?
- ▶ Is everything that shows up on an internet search of your name public information about your qualities?
- ▶ The internet has a long memory: Do you have a **right to be forgotten?**
- ▶ True or False: "If you share something with anyone on the Web, it's liable to be shared with everyone on the Web"<sup>2</sup>

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<sup>1</sup>Michael Quinn, *Ethics for the Information Age*, pg 254

<sup>2</sup><http://www.cnn.com/2013/04/24/tech/web/sorority-email-rant/>



# Tougher Questions

- ▶ What information should the **government** have to do its job?
- ▶ What is the difference between Government and Target?

## Example<sup>3</sup>

Police in Santa Cruz, CA created a database of information about ... burglaries then used datamining to produce 15 hotspots. ... Officers make a point of passing through the hotspot areas when not handling other calls. ... Over 6 months burglaries declined 19 percent. ...

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<sup>3</sup>Michael Quinn, *Ethics for the Information Age* section 6.8.4

# When the Government Comes Knocking

## CEO

If you have something that you don't want anyone to know, maybe you shouldn't be doing it in the first place.

- ▶ Eric Schmidt, Google CEO, [CNBC Interview on disclosing info to the government, 2009](#)

## Senator

Why are the telephone companies not protecting their customers? They have a social responsibility to people who do business with them to protect our privacy as long as there isn't some suspicion that we're terrorist or a criminal or something.

- ▶ Sen. Chuck Grassley of Iowa, [2006 senate debates](#)

## Activist

Asking "Why should I worry if I have nothing to hide?" is the wrong formulation. The question should be "Since I have done nothing wrong, why should the government be investigating me?"

- ▶ Jerry Berman, Center for Democracy and Technology (Quinn, Ch 6 Interview).

# Frontline (20 min)

## Frontline Link

### Context

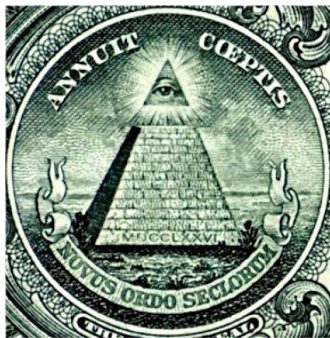
- ▶ 09/11/2001: Terrorists attack New York City/Washington DC
- ▶ ??/??/2002: Pres. Bush authorizes domestic wiretapping
- ▶ 12/25/2002: Suspected terrorist plot, New Years, Las Vegas
- ▶ ??/??/2003: NSA builds AT&T wiretapping room + others
  - ▶ Begin monitoring 10% of domestic internet traffic
- ▶ 12/16/2005: NYT reports on domestic wiretapping
- ▶ 01/31/2006: EFF Files suit to stop NSA/AT&T Collaboration
- ▶ 05/15/2007: **Frontline Episode**
- ▶ 01/??/2013: Snowden Contacts Guardian Reporters
- ▶ 05/XX/2013: Guardian Prints first NSA story based on leaks

# All-Seeing Eyes

Documents leaked by Edward Snowden imply

- ▶ TIA went forward
- ▶ Wide-spread NSA surveillance
- ▶ Gov't has accessed large swaths of digital data

The Bad?



The Ugly?



# Last Time: Privacy and Government

## From Last Time

- ▶ Is it easy to increase security and privacy at the same time?
- ▶ Why or why not?

## ISPs Can Sell Your Data

- ▶ Before you lament the end of your internet privacy, read [this](#) by Iman Smith
- ▶ March 31, 2017, PBS Newshour
- ▶ Summarizes recent laws passed to allow freer use of internet traffic

## Encryption and Privacy

- ▶ PBS NewsHour Discussion of Encryption and Terrorism
- ▶ November 18, 2015
- ▶ [Part 1](#)
- ▶ [Part 2](#)

# Whistleblower or Traitor?

## Video: Edward Snowden in his own words

- ▶ Initial Guardian Newspaper interview
- ▶ June 9, 2013

## Items to listen for

- ▶ *Motivation*: Why did Snowden decide to reveal information about government surveillance programs?
- ▶ *Who*: Who did Snowden reveal information to?
- ▶ *Consequences*: Was Snowden breaking the law with his disclosure? What personal consequences did he accept for his actions
- ▶ *Verdict*: In your judgment, did he make the right decision?

## Trade-offs of Patriot Act Era

- ▶ 361 charges brought, 191 convictions/guilty pleas
- ▶ 500 individuals associated with 9/11 removed from USA
- ▶ Numerous cells broken up
- ▶ A few very bad calls: [Brandon Mayfield](#)
  - ▶ Scan the Wikipedia article about Brandon Mayfield
  - ▶ Summarize his story

# What If...



- ▶ Has the US ever been at war with Mexico?
- ▶ What personal data could become dangerous to have online?
- ▶ Would there be any personal implications for you or your friends?



# Privacy Wrap-up

## Take-home Message

Information gives power. Digital Tools Give Power. It is difficult to predict how that power will be used. Beware of reactionary measures that grant tremendous power. Be cognizant of power shifts.

## Timeline of NSA Spying

Courtesy of the Electronic Frontier Foundation

- ▶ <https://www.eff.org/nsa-spying/timeline>
- ▶ Linked articles

## Mini-Exam 4

Now