CS 105: Privacy and The Social Network

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Week 7
Announcements

Assignment 2
Due Thu 10/27 by 11:59 p.m.
Studying Security at GMU

Two CS Courses

468 Secure Programming and Systems
Basic Crypto, programing to avoid exploits/flaws

469 Secure Engineering
Company-level view, protect against external and internal threats
Goals

- Finish Security
- Quiz 2
- On to privacy

Note: Additional GMU info on phishing:
http://oit.ncsu.edu/email/recognizing-phishing-email
Continue discussion of passwords from Week 6

- Cracking techniques
- Secure selection methods
Open Debate: White Hat Hackers \equiv Whistleblowers?

- **Mat Honan**: Article describes how to penetrate Apple account. 
  *The hack is* so easy that *Wired* was able to duplicate the exploit twice in minutes.

- **Eric Butler**: Produced Firesheep a tool for sidejacking. 
  *The attack that Firesheep demonstrates* is easy to do using tools that have been available for years.

Source: SecurityMonks.com (??)
Quiz 2

Now
Privacy in The Past

"On the Internet, nobody knows you're a dog."

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

If people value privacy so much why do they put so much personal information online?¹

http://www.youtube.com/watch?v=juQcZO_WnsI

¹Quinn, pg 254 #26
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 anywhere)
- 3 min to think/write
- Share as group
Watch

Hot on Your Trail: Privacy, Your Data, and Who Has Access to It
As you watch, check anything on your list that isn’t as private as you thought
The Present

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

It May Hurt
Loans denied, jobs lost, relationships ruined, court cases lost
"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
For Next Week

Privacy and Government

- Quinn: Ch. 6 (all)
Nuggets

The following slides are tidbits which you may find interesting
Optional Listening

Listen:

▸ NPR: To Catch Worker Misconduct, Companies Hire Corporate Detectives
▸ NPR: Your Digital Trail: Private Company Access
▸ NPR: Public Or Private: Keeping Google From Being 'Evil'
Annual time estimates for reading and skimming online privacy policies

<table>
<thead>
<tr>
<th>Type</th>
<th>Time</th>
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<tbody>
<tr>
<td>Individual</td>
<td></td>
</tr>
<tr>
<td>Full Read</td>
<td>244 hours / year</td>
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<tr>
<td>Skim</td>
<td>154 hours / year</td>
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<tr>
<td>Total national</td>
<td></td>
</tr>
<tr>
<td>Full Read</td>
<td>53.8 billion hours / year</td>
</tr>
<tr>
<td>Skim</td>
<td>33.9 billion hours / year</td>
</tr>
</tbody>
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Summer 2012, Facebook had an election: vote on their privacy policy

- 30% or more turnout, binding
- less than 30% turnout, advisory
- Guess what the turnout was?
  - 0.07% turnout
FB Bad!
Marky Z

Notable
- Affects College grades
- Increases Divorce
- 8.7% fake

From Wikipedia: Criticisms of Facebook
Our philosophy is that people own their information and control who they share it with. One of the questions about our new terms of use is whether Facebook can use this information forever. When a person shares something like a message with a friend, two copies of that information are created—one in the person’s sent messages box and the other in their friend’s inbox. Even if the person deactivates their account, their friend still has a copy of that message. We think this is the right way for Facebook to work, and it is consistent with how other services like email work. One of the reasons we updated our terms was to make this more clear. In reality, we wouldn’t share your information in a way you wouldn’t want.

– Mark Zuckerberg, 2009 blog post on Terms of Service Change

http://blog.facebook.com/blog.php?post=54434097130
What Can FB Do with Your Stuff?

For content that is covered by intellectual property rights, like photos and videos ("IP content"), you specifically give us the following permission, subject to your privacy and application settings: you grant us a non-exclusive, transferable, sub-licensable, royalty-free, worldwide license to use any IP content that you post on or in connection with Facebook ("IP License"). This IP License ends when you delete your IP content or your account unless your content has been shared with others, and they have not deleted it.

- Facebook Terms of Service
But most of all, Samy is my hero

I’ll never get caught, I’m popular.
–Samy Kamkar, JS.Spacehero worm author

Samy

His story http://namb.la/popular/
How http://namb.la/popular/tech.html