CSCI 215 Social & Ethical Issues In Computing

Class 11 –
Notes

• Grades are updated for hands-on participation
• Bonus Homework, next week’s homework
  • A two parter
• This week the proposal is due
• Recitations (Today)
  • Discussion: Roberts 412
  • Hands on: Roberts 208
Review

• What prevents me from discussing your grades with your classmates?
  • A. HIPPA  B. FERPA  C. The CS department  D. COPPA

• Which Amendment protects your privacy against the government searching your house (without a warrant)?
  • A. First  B. Eightieth  C. Fourth  D. Zeroth
Whistleblowing

• Who is Julian Assange?
• Who is Edward Snowden?
Julian Assange

- Australian Journalist / Computer Programmer / Hacker
- Editor in Chief of WikiLeaks (sometimes credited as founder)
- Currently has political asylum in Ecuador

“to bring important news and information to the public... One of our most important activities is to publish original source material alongside our news stories so readers and historians alike can see evidence of the truth.”
WikiLeaks

WikiLeaks Documents and controversy Examples
• Treatment at Guantanamo Bay Procedures
• Report of Australian Government censoring websites
• Apache Helicopter attack footage in Iraq
NSA

• Formed in 1952 on President Harry Truman’s order following codebreaking in WWII

• “… we gather information that America's adversaries wish to keep secret. Through Information Assurance, we protect America's vital national security information and systems from theft or damage by others.

• Through carrying out its missions, NSA/CSS helps save lives, defend vital networks, and advance our Nation's goals and alliances, while strictly protecting privacy rights guaranteed by the U.S. Constitution and laws”

• https://www.nsa.gov/about/faqs/about_nsa.shtml
Edward Snowden

- American Computer Professional
- Contractor who leaked classified NSA data
- Temporary asylum in Russia
Thomas Andrew Drake

- Senior Executive of NSA for 7 years
- 2008 Attempted to alert his superiors and Congress to what he saw as illegal activities, waste and mismanagement at the NSA
- Reported unclassified documents to a reporter using encrypted channels
- Charged with numerous counts, including Espionage Laws violations. Faced up to 35 years in prison
- 2011 settled and sentenced to 1 year probation and 240 hours community service
Some of the info leaked by Snowden

- **PRISM**: Planning Tool for Resource Integration, Synchronization, and Management
- "data tool" designed to collect and process "foreign intelligence" that passes through American servers – it cannot *intentionally* target a US Citizen
Some of the info leaked by Snowden

**Upstream: Intercept data over fiber cables (i.e. the internet)**

- Under "upstream" surveillance, an American sending an email or making a video call to someone in another country could have the content of their correspondence collected by the NSA.

- That might even be true if the message is sent to someone in the U.S. but the data was passed through a foreign server.
Some of the info leaked by Snowden

Phone Meta Data
• Cannot keep the content of phone calls, but can keep meta data
• For Example:
  • Phone numbers of both caller and recipient
  • Number of any calling cards used
  • Time and Duration of calls
What allows NSA to do this?

- Section 215 of Patriot Act (and its successor USA Freedom Act)
- FISA (Foreign Intelligence Surveillance Act)

In regards to the phone metadata
- **May 2015**: Declared collecting phone metadata illegal
- **August 2015**: U.S. appeals court overturned lower’s court ruling
Some Issues

NSA defends collecting information about US Citizens because it is not intentionally targeting them – it’s just part of the mass surveillance.

• Any Analyst can abuse these tools (though take comfort because “this doesn’t happen a lot”)
  • According to Snowden:
  • “In the course of their daily work they stumble across something that is completely unrelated to their work, for example an intimate nude photo of someone in a sexually compromising situation but they’re extremely attractive,” he said. “So what do they do? They turn around in their chair and they show a co-worker. And their co-worker says: ‘Oh, hey, that’s great. Send that to Bill down the way.’”
Some Issues

NSA defends collecting information about US Citizens because it is not intentionally targeting them – it’s just part of the mass surveillance.

• Analysts can (and do) use them (though take comfort because “this doesn’t happen a lot”)
  • LOVEINT: spy on love interests, spouses, and ex-spouses
  • 2 former NSA reported that they listened to soldiers overseas:
    • "Hey, check this out," one said he would be told, "there's good phone sex or there's some pillow talk, pull up this call, it's really funny, go check it out. It would be some colonel making pillow talk and we would say, 'Wow, this was crazy.'"
Some Issues

NSA directors have lied to Congress on a number of issues. By NSA’s own admissions

• Originally defended these actions by stating this data has helped to stop 54 terrorist attacks
• Later admitted to only 13 attacks on or in the US
• Then revealed only 1 of these attacks was discovered through mass surveillance (as opposed to confidential informants, existing law enforcements, etc)
• And this was not an attack or plot, it discovered a taxi driver and 3 accomplices raised $8000 to a Somolian terrorist group (who has never been involved with an attack on US)
Discussion Point

• How much privacy should a government have from it’s citizens?

• As a reminder, The Fourth Amendment prohibits unreasonable searches and seizures and requires any warrant to be judicially sanctioned and supported by probable cause. Do you think this can be extended to mass surveillance?

• How much privacy should a citizen have from their government?