

# CS 4873: Computing, Society & Professionalism

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## Week 7: Privacy and Governmental Surveillance

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# Big data meets Big Brother as China moves to rate its citizens

*Rachel Botsman*


23-29 minutos

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On June 14, 2014, the State Council of China published an ominous-sounding document called "Planning Outline for the Construction of a Social Credit System". In the way of Chinese policy documents, it was a lengthy and rather dry affair, but it contained a radical idea. What if there was a national trust score that rated the kind of citizen you were?

# A Balancing Act

- Federal, state, and local governments in United States have had significant impact on privacy of individuals
- Government must balance competing desires of citizens
  - desire to be left alone
  - desire for safety and security



\* Two case examples of this balancing act...

# Solove's Taxonomy of Privacy

- **Information collection:** Activities that gather personal information
- **Information processing:** Activities that store, manipulate, and use personal information that has been collected
- **Information dissemination:** Activities that spread personal information
- **Invasion:** Activities that intrude upon a person's daily life, interrupt someone's solitude, or interfere with decision-making

# Class Discussion: Relationship with definitions of privacy

- 1) **Information collection** – gathering personal information.
  - 2) **Information processing** – storing, manipulating, using personal info that has been collected
  - 3) **Information dissemination** – spreading personal information
  - 4) **Invasion** – intruding upon a person's daily life, interrupting someone's solitude, or interfering with decision-making
- a) Privacy is the right to be left alone (Warren & Brandeis).
  - b) Privacy is the state of being away from public attention (Gavison).
  - c) Privacy is control over who knows what about us (Rachels).
  - d) Privacy is the appropriate flow of personal information (Nissenbaum).
  - e) Privacy is not simply an absence of information about us in the minds of others; rather it is the control we have over information about ourselves (Fried).



# Information Collection by the Government (Direct)

- Purpose: accountability and fairness

# \* Census Records

- Census required to ensure every state has fair representation
- Number of questions steadily rising
- Sometimes Census Bureau has broken confidentiality requirement
  - World War I: draft resisters
  - World War II: Japanese-Americans




# \* Internal Revenue Service Records

- The 16<sup>th</sup> Amendment to the US Constitution gives the federal government the power to collect an income tax
- IRS collects more than \$2 trillion a year in income taxes
- Income tax forms contain a tremendous amount of personal information: income, assets, to whom you make charitable contributions, medical expenses, and more

# FBI National Crime Information Center

2000

- **NCIC**
  - Collection of databases related to various crimes
  - Contains > 39 million records
- **Successes**
  - Helps police solve hundreds of thousands of cases every year
  - Helped FBI tie James Earl Ray to assassination of Dr. Martin Luther King, Jr.
  - Helped FBI apprehend Timothy McVeigh for bombing of federal building in Oklahoma City



*Discussion Point:* What are the downsides of maintaining the NCIC database?

# Closed Circuit Television Cameras

- First use in Olean, New York in 1968
- Now more than 30 million cameras in US
- New York City's effort in lower Manhattan
  - \$201 million for 3,000 new cameras
  - License plate readers
  - Radiation detectors




*Discussion Point: Are*  
surveillance cameras effective?

Mixed opinion: ACLU opposition; London bombings in subway in 2005

# Social Security Number

- Social Security cards first issued 1936
- Originally used only for Social Security purposes
- Use of SSN has gradually increased
- SSN is a poor identification number
  - Not unique
  - Rarely checked
  - No error-detecting capability



SSN -> National Identification Card ->  
Discussion in your section this week



# Challenges of government information collection



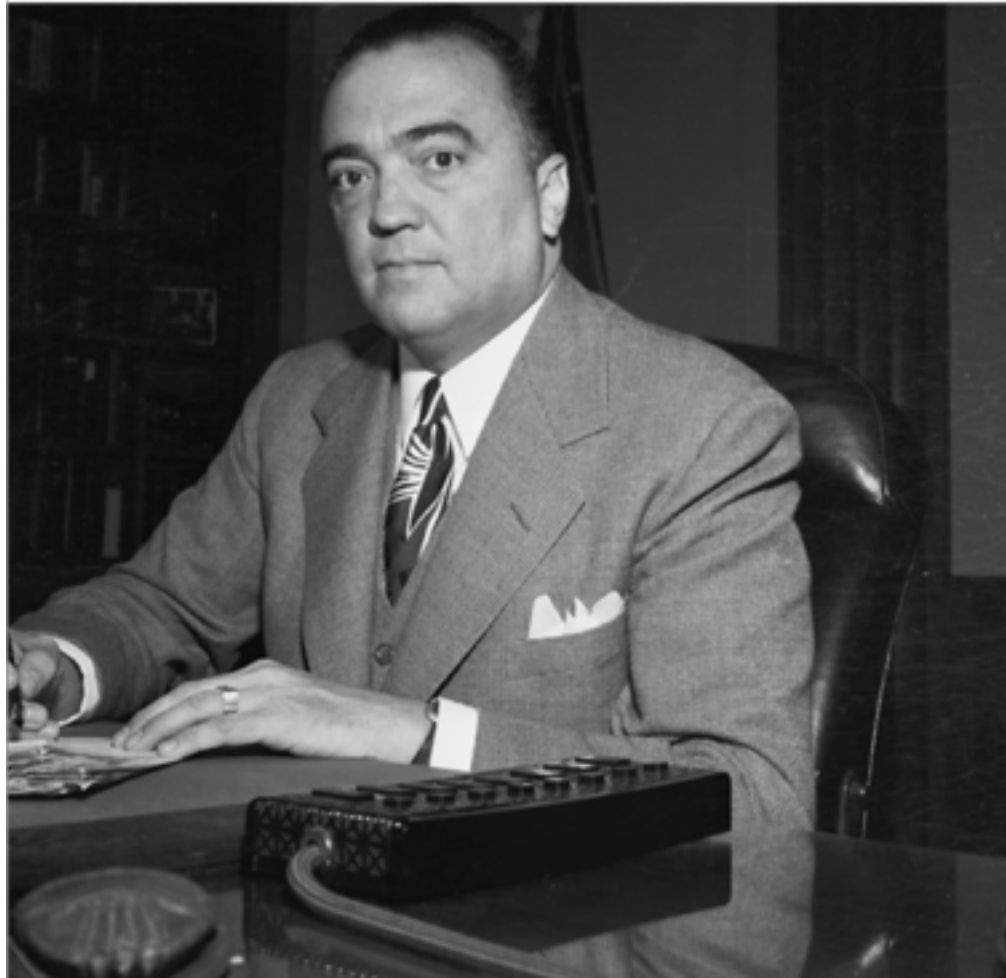
# Surveillance Camera Images of Boston Marathon Bombing Suspects





# Covert Government Surveillance

# Wiretapping – J. Edgar Hoover



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First Director of FBI

# Privacy Post 9/11

- National security concerns increased significantly after 9/11 attacks

# Privacy Post 9/11

- (2006 poll) 70% Americans supported “expanded camera surveillance on streets and in public places”
- 62% supported “law enforcement monitoring of Internet discussions in chat rooms and other forums”
- 61% supported “closer monitoring of banking and credit card transactions to trace funding sources”
- 52% supported “expanded governmental monitoring of cell phones and emails to intercept communications”

# NSA Wiretapping Post 9/11

- President Bush signed presidential order
  - OK for NSA to intercept international phone calls & emails initiated by people inside US
  - No search warrant required
- Number of people monitored
  - About 500 people inside US
  - Another 5,000-7,000 people outside US
- Two al-Qaeda plots foiled
  - Plot to take down Brooklyn bridge
  - Plot to bomb British pubs and train stations




# Information Processing/Mining by the Government

# Syndromic Surveillance Systems

- Syndromic surveillance system: A data mining system that searches for patterns indicating the outbreak of an epidemic or bioterrorism
  - 911 calls
  - emergency room visits
  - school absenteeism
  - Internet searches
- Example: A system in New York City detected an outbreak of a virus in 2002






When can information  
processing/data mining by the  
Government go wrong?



The  
Intercept\_

**THE NSA'S  
SECRET ROLE IN  
THE U.S.  
ASSASSINATION  
PROGRAM**





Government Legislation  
restricting information  
dissemination

# Family Education Rights and Privacy Act (FERPA)

- Rights given to
  - Students 18 years and older
  - Parents of younger students
- Rights include
  - Reviewing educational records
  - Requesting changes to erroneous records
  - Preventing release of records without permission

# Health Insurance Portability and Accountability Act (HIPAA)

- Limits how doctors, hospitals, pharmacies, and insurance companies can use medical information
- Health care providers need signed authorization to release information
- Health care providers must provide patients with notice describing how they use medical information