Topics

- Perspectives on privacy
- Disclosing information
- U.S. legislation regarding privacy
- Public records
- Social Networks
Topics

• Government surveillance
• U.S. legislation on wiretapping
• Big Data....Data mining
• Identity theft
• Communication security ... Encryption
Perspectives on Privacy

- Defining privacy
- Harms and benefits of privacy
- Is there (should there be) a right to privacy?
- Privacy and trust

- Definition?
Defining Privacy

- Privacy -- control of access to a person and their personal information
- Access to a person
  - Physical proximity to a person
  - Information about a person
- Edmund Byrne: Privacy is a “zone of inaccessibility”
Privacy vs Intellectual Property Rights

• How same? -- How different?
• information
• stakeholders
Personal -vs- IP

- IP... commercially valuable thought product
- media companies, authors, consumers
- Privacy... low commercial value by-product of living life
- self, family, friends, companies, government
Personal Information

• Examples/types of personal information
Privacy

- What are the benefits of privacy?
- What are the costs of privacy?
- Should we recognize a right to privacy?
- How would we state this right?
- Utilitarian Analysis
Benefits of Privacy

• Individual responsibility and achievement
• Freedom to be yourself
  intellectual and spiritual growth
• Development of trusting, intimate relationships
Costs of Privacy

• Cover for illegal or immoral activities
• Fewer sources of help when needed
• Ignores people on society’s fringes
Is There a Right to Privacy?

- Morton Levine: Property rights → Privacy rights
- Warren and Brandeis.. yes, reaction to press intrusion..
  - “right to be let alone”
- Judith Jarvis Thomson: no, “privacy rights” are derived from other rights
- US Bill of Rights .. not directly, but elements of
US Bill of Rights

- 3rd Amendment
  protection from quartering of soldiers
- 4th Amendment
  protection from unreasonable search and seizure
- 5th Amendment
  right to due process
  protection from self-incrimination
Giving Private Information

• Why do we give out private information to governments and companies?
Privacy and Trust

• Modern real-life is relatively private/anonymous
• Challenge: living among strangers
• Remedy: establishing reputations
  • Ordeal - lie detector, drug test, body scan
  • Credential - driver’s license, keys, credit card, ID card
• Establishing reputation → reducing privacy
Information Policies

• Given that we do give private information to government and companies,

• What are some general principles for handling of personal information that respect privacy?

• Fair Information Practices
Fair Information Practices

• No secret databases, those entered should know it
• People have access to personal information in databases
• People should be able to correct or amend errors
• Database owners cannot change how information is used without consent
• Database owners and users responsible for reliability of data and preventing misuse
Privacy Act of 1974

- Encoded the above principles
- Applies only to government databases
- Only covers records indexed by a personal ID
- No federal employee responsible for enforcing Privacy Act provisions
- Allows agencies to share records
Examples of US Public Records

- Census records
- Internal Revenue Service records
- FBI National Crime Information Center 2000
Census Records

- Census required to ensure every state has fair representation
- Number of questions and uses of records had been steadily rising
- Sometimes Census Bureau has broken confidentiality
  - World War I: draft resisters
  - World War II: Japanese-Americans
- Data analysis --- identifiability
Census Analysis

- re-identification
- 87% by zip code, gender, date of birth
- microdata sets
- adding data or noise
Internal Revenue Service Records

- Much personal information on tax forms
- Some IRS employees have misused access to IRS records
- IRS has also misplaced laptops, tapes and diskettes containing records
FBI National Crime Information Center

- NCIC
  - Compilation of databases related to various crimes
- Successes
  - Helps police solve hundreds of thousands of cases
- Timothy McVeigh
- Problems???
Criticisms of the NCIC

- Erroneous records have led to false arrests
- Police have arrested innocent people with same name as someone in NCIC database
- FBI has used NCIC to keep records of people not suspected of any crime
- Corrupt law-enforcement employees have sold information and altered records
Acquisition of Personal Information

- New information technology has created a wide range of ways that personal information can be acquired by others without asking
  - informational enrichment (Moor)
- How is personal information acquired?
Ways Personal Information is Acquired

- Email monitoring
- Digital video surveillance recorders
- Enhanced 911 service, GPS in phones
- RFIDs, implanted chips track movements
- Cookies, spyware
Commercial Surveillance and Data Management

- Collecting business behaviors
- credit reports, mortgages, bankruptcies
- Collecting online behaviors
- browsing, searching, social networks
Non-governmental Databases

- Fair Credit Reporting Act
- The Family Education Rights and Privacy Act
- Video Privacy Protection Act
- Financial Services Modernization Act
- Children’s Online Privacy Protection Act
- Health Insurance Portability and Accountability Act
Fair Credit Reporting Act

- Promotes accuracy and privacy of information used by credit bureaus
- Ability to request and correct credit report
- Negative information kept only 7 years
- Exceptions
  - Bankruptcies: 10 years
  - Criminal convictions: indefinitely
Family Education Rights and Privacy Act (FERPA)

- Rights given to
  - Students 18 years, parents of younger students
- Rights include
  - Reviewing educational records
  - Requesting changes to erroneous records
  - Preventing release of records without permission
Video Privacy Protection Act

- Videotape service providers cannot disclose rental records without consumer’s written consent
- Rental stores must destroy personal information related to rentals within a year
Financial Services Modernization Act

- Creates “financial supermarkets” offering banking, insurance, and brokerage services
- Privacy-related provisions
  - Privacy policies must be disclosed to customers
  - Notices must provide an opt-out clause
  - Companies must develop procedures to protect customers’ confidential information
Children’s Online Privacy Protection Act

- Reduces amount of personal information gathered from children
- Online services must gain parental consent before collecting information from children 12 and under
Health Insurance Portability and Accountability Act

• 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
Big Data

- Gathering of personal information by independent companies who sell the data or sell the results of data mining (i.e., patterns in the data) to others
- Estimated annual market is over $150 billion
- Largely unregulated
  - Sources not revealed
  - Accuracy often not a concern
Identity Theft

- Background
- History and role of the Social Security Number
- REAL ID Act
- Debate over a national ID Card
• Identity theft: misuse of another person’s identity to take actions permitted for the owner
• Credit card fraud #1 type of identity theft
• Over 10 million victims per year
• Average loss: $5,000
  • How gain access to this information?
Identity: Social Security Number

- Social Security cards first issued 1936
- Use of SSN has gradually increased
- SSN is a poor identification number
  - Not unique
  - Rarely checked
  - No error-detecting capability
The REAL ID Act

- Signed in May 2005
- Significantly changes driver’s licenses in the United States
- New licenses by end of 2008
  - Required to open bank account, fly on commercial airplane, or receive government service
  - Requires applicants to supply 4 different ids
  - May contain a biometric identifier
  - Must contain data in machine-readable form
National ID Card

- Should we have a national ID Card?

- If so, what should be on it... how would it work?
National ID Card

• What is it?
• What would be included?
Arguments for a National ID Card

• Current ID cards are second-rate
• Would reduce illegal entry to U.S.
• Would reduce crime, better tracking
• Other democratic countries have national ID cards
Arguments against a National ID Card

• No card positively guarantees identification
• No biometric-based system is 100% accurate
• No evidence it will reduce crime
• Makes government data mining simpler
European/American Privacy

- Europe
  - more open to government
  - less open to companies
  - less open to others