Privacy in a Networked World

Instructor: Antonio R. Nicolosi

nicolosi@cs.stevens.edu
Prosser’s Privacy Torts

**Invasion of privacy cases recognized in Courts**

- **Intrusion upon seclusion** or into private affairs
- **Public disclosure** of embarrassing private facts
- **Distortion** of facts, placing one in false light
- **Likeness appropriation**
General categories of privacy problems

- Information Collection
- Information Processing
- Information Dissemination
- Intrusion
**Information Collection**

- **Surveillance**
  - Closed-circuit TV & cameras
  - Network monitoring

- **Interrogation**
  - “Tough” law enforcement
  - Product registration
  - On-line surveys & promotions
Information Processing

- Aggregation
- Identification
- Insecurity
  - Unauthorized access and data leakage
- Secondary Use
- Exclusion
  - Correcting inaccuracies in one’s own profile
Solove’s *Taxonomy of Privacy* (3)

**Information Dissemination**

- Breach of Confidentiality
- Disclosure
- Exposure
- Increased Accessibility
- Blackmail
- Appropriation
- Distortion
Solove’s *Taxonomy of Privacy* (4)

<table>
<thead>
<tr>
<th>Invasion</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Intrusion</td>
</tr>
<tr>
<td>- SPAM and Ad-ware</td>
</tr>
<tr>
<td>- Junk mail</td>
</tr>
<tr>
<td>- Phone solicitation</td>
</tr>
<tr>
<td>● Decisional Interference</td>
</tr>
<tr>
<td>- On-line ads</td>
</tr>
<tr>
<td>- Product recommendations</td>
</tr>
</tbody>
</table>
Nissebaum’s *Contextual Integrity*

**Conceptual Framework for Assessing Privacy Violations**

- **Contexts** (or spheres)
- **Regulating norms**, specifically about **information**
  - Norms of **appropriateness**
  - Norms of **distribution/flow**
- **Case study:**
  - Public records online
  - Consumer **profiling**
  - RFID
  - Privacy in public (**surveillance**)
Identity and Anonymity

Seven Forms of Identity (G.T. Marx)

1. Legal name (who?)
2. Reachability (where?)
3. Linkable pseudonyms
4. Unlinkable pseudonyms
5. Pattern knowledge (unnamed vs. unknown)
6. Social categories
7. Eligibility (what?)
Why Identification?

“You ought to have some papers to show who you are.”
The police officer advised me.

“I do not need any paper. I know who I am,” I said.

“Maybe so. Other people are also interested in knowing who you are.”

[The Death Ship, B. Traven]
### Why identification?

- **Accountability**
  - Enforcing laws and social norms

- **Reciprocity**
  - Linking interactions at different times/places
  - *E.g.*, tit-for-tat, *quid pro quo*

- **Reputation**
  - Linking interactions w/ different entities
  - *E.g.*, recommendations, vouching
Why anonymity?

- Facilitate reporting/auditing
  - “If you kill the messenger, you won’t hear bad news”
- Encourage attention on speech, not on speaker
  - Anonymous grading?!
- Encourage info seeking or other “good” behavior
  - Alcoholics Anonymous, HIV testing
  - Participation in medical research
  - Needle-exchange programs
Why anonymity?

Stop Info Lifecycle at its root

- gathering
- processing/analysis
- enhancement/maintanance
- dissemination

DB