



Attacks

CIS/CSE583




Three Types of Attacks

- Criminal
- Privacy Attacks
- Publicity
- Legal



Criminal Attacks

- Fraud and Scams
 - Counterfeit money (e-money)
 - Fake transactions
 - MLM
 - 419
- Destruction
 - Webpage defacement (mild)
 - Denial of service attacks
 - Don't forget physical attacks and their affect on systems (e.g., banking centers)



Criminal Attacks II

- IP Theft
 - Pirate copies of software (and movies, music, etc.)
 - Trade secrets
 - Classic espionage
- Identity and Brand Theft
 - Don't steal from me: beme!
 - Credit cards, etc.
 - SSN as global identifier
 - 1-800 numbers
 - Pagejacking
 - www.whitehouse.com



Privacy Violations

- Who owns the data about you?
 - US: whoever collects it
 - Most of the rest of the world: you
- Targeted attack: find out everything you can about entity X (person or company)
- Data Harvesting: correlating (publicly?) available information to find likely targets



Surveillance

- 100 years ago, go into an open field, look around, and talk.
- Now, satellites can read the lettering on a pack of cigarettes from space
- Cameras are ubiquitous
- Microphones can pick up sound from hundreds of yards away



Non-surveillanceSurveillance

- Ezpass
- Amazon,etc.(again)
- HTTPCookies
- Creditcardpurchases
 - Fraudprotection
 - Cashbackincentives
- Frequent-buyerprograms



Databases

- Wheredoesallthatinformationfromthe creditcardcompanies, Wegman's,etc. endup?Indatabases
- WhydoesyourDr.needyourSSNtotreat you?
- Whydoyougetjunkmail?Whydoyou getcertainkindsofjunkmail?
- Spam(spammy Spam,wonderfulSpam)



TrafficAnalysis

- Lookatthenumber,frequency,size, anddestinationofmessages,notthe contents
- Usefulforanalyzingencryptedtraffic.
- Deviationsfromacceptednormscan raiseflags
 - PizzastothePentagon
 - Finding steganography