

# Biometrics

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October 9, 2014

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*Privacy Policy, Law, and Technology*



# Today's Agenda

- Quiz
- Discussion on Biometrics
- Field trip to Biometrics lab

# By the end of class, you should be able to:

- Describe several types of biometrics and how they are used
- Reason about privacy concerns related to biometrics

# Types of biometrics

- DNA
- Ear
- Iris matching
- Face recognition
- Fingerprint
- Gait
- Hand Geometry
- Odor
- Signature
- Typing patterns
- Voice recognition

# Biometrics used for

- Authentication
  - One to one matching
- Identification
  - One to many matching
- Security
- Alternative to passwords

# Privacy concerns of biometrics

- If your biometrics are stolen or compromised, can not be reset or replaced
- Can be detected without your cooperation
  - Surveillance
- Creation of databases with information
- Implicated in crimes

# Other ethical concerns with biometrics

- Only as good as the initial identification
- Accuracy may differ in minority populations
- Trade-off between false-positive and false-negative

# Case Study

- Biometrics in national identity cards
  - Which biometric?
  - When is it issued (e.g. at birth)
  - Why?
  - Why not?