

# Book: Data and Goliath

- Hieu Tran -

# Data as a By-product of Computing

Chapter 1

# Data are generated everyday

- We create data everyday
  - Applications
  - Cars
  - Electronic devices
  - Purchases using payment cards
  - Video surveillance
  - Conversations with people
- Data are captured and transferred everyday

# How much data

- Humans produce huge data size
- Costs for storing data are reducing
- Companies' strategy of saving user's data
  - Save all rather than choosing what to save
  - Not yet specific plan to use such data

# Data as Surveillance

## Chapter 2

# Metadata collection and surveillance

- Metadata: set of data to describe other data
- E.g. Phone metadata
  - Length of call, time, participants
  - Not actual call discussion
- Controversy over metadata gathering
  - Government / Companies store and analyze huge amount of data
  - Government claims collection of metadata is uncritical
  - However, a person can be pictured
  - Research by Stanford: examining phone metadata
- Metadata is useful for examining large group of people

# Surveillance becomes cheaper

- Lower price for computing technology
  - Less expenses on collecting people's information
  - Encourage to collect more data
- Cheaper and easier to buy spy items (hidden camera, recorder, etc.)

# Mass surveillance

- Cheaper surveillance due to development of computing technology
  - Lower price for data storage, data recording
  - Encourage to collect more data
- More surveillance = mass surveillance
  - Collect data as much as possible



# Hidden surveillance

- We are unaware of how we are tracked
  - Location tracking by cell phone
  - Online activities are recorded (purchases, payments, web searching, chatting)
- Surveillance technologies become more advanced
  - CCTVs (streets, ATMs, markets, restaurants)
  - Drones or similar flying objects
  - Faces recognition

# Automatic surveillance

- Surveillance happens automatically everyday even we try to avoid
  - Many website connects with social media => we are tracked once we visit
  - Google Analytics records information of visitors
  - Apple has database of passwords
  - Being recorded by CCTVs when walking on streets

Thanks for your listening

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