1. Sharing Multimedia and Privacy
   1. Observations
      1. Many Internet sites and mobile apps encourage sharing of data as too easily and users just follow along.
      2. Users and often software engineers are often unaware of (hidden) search and retrieval possibilities of shared data.
   2. Social Cause
      1. People want to post in the internet and like a highly-personalized experience.
      2. Industry is improving search and retrieval methods.
      3. Governments are also improving search and retrieval methods.
   3. Where to draw the line
      1. Cybercasing – using online data and services to enable “real world” crimes
   4. Focus
      1. The previous described issues are a problem with any type of public or semi-public posts
      2. Let’s focus on multimedia images
   5. Multimedia in the Internet is growing
   6. Resulting problem
      1. More multimedia data = higher demand for retrieval and organization tools.
      2. But multimedia retrieval is hard.
         1. Researchers work on making retrieval better.
         2. Industry develops workarounds to solve these issues
   7. Hypothesis
      1. Retrieval is already good enough to cause major issues for privacy
      2. Workarounds:
         1. Manual tagging
         2. Geotagging
            1. Allows easier clustering of photo and video services as well as additional services
            2. Support for Geo-tags

Social media portals provide API’s to connect geo-tags with metadata, accounts, and web content.

Be careful when using social location services.

* + 1. Since geotagging is a workaround for multimedia retrieval, it allows us to peek into a future where multimedia retrieval works. What if multimedia retrieval actually worked?
       1. Many ads with geo-location otherwise anonymized
       2. Sometimes selling high-valued goods, Ex: cars, diamonds
       3. Sometimes “call Sunday after 6 pm”.
       4. Multiple photos allow for higher accuracy to find location
    2. YouTube
       1. Once data is published, the Internet keeps it
       2. API’s are easy to use and allow quick retrieval of large amounts of data
    3. Persona Linking using Internet videos
       1. On average having 20 videos in the test set leads to a 99% chance for a true positive match!