Fair information practices and privacy principles

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Privacy Policy, Law, and Technology

Carnegie Mellon University
CyLab

institute for SOFTWARE RESEARCH

Engineering & Public Policy

CyLab Usable Privacy & Security Laboratory
HTTP://CUPS.CS.CMU.EDU

Using Library Resources

CMU Libraries

- http://library.cmu.edu

- Engineering and Science (a.k.a. E&S)

  - Location: Wean Hall, 4th floor
  - Subjects: Computer Science, Engineering, Mathematics, Physics, Science, Technology

- Hunt (CMU's main library)

  - Location: Its own building, between Tepper and Baker
  - Subjects: Arts, Business, Humanities, Social Sciences

- Software Engineering Institute (a.k.a. SEI)

  - Location: SEI Building (4500 Fifth Avenue), 3rd floor
  - Subjects: Security, Software, Technology

- Lots of online resources

  - Check "off-campus/wireless" link for VPN instructions

If it's not at CMU, but you need it today: Local Libraries

- Carnegie Library of Pittsburgh

  – Two closest locations

    - Oakland: Practically on campus (4400 Forbes Ave.)
    - Squirrel Hill: Forbes & Murray (5801 Forbes Ave.)

  – http://www.carnegielibrary.org/

- University of Pittsburgh Libraries

  – 16 libraries! Information science, Engineering, Law, Business, etc.

  – Get a borrowing card by showing CMU ID at Hillman Library lending desk

  – http://pittcat.pitt.edu/

If it's not at CMU, and you can wait: ILLiad and E-ZBorrow

- ILLiad and E-ZBorrow are catalogs of resources available for Interlibrary Loan from other libraries nationwide (ILLiad) and in Pennsylvania (E-ZBorrow)

- Order items online (almost always free)

- Delivery usually in a few days to 2 weeks

- Find links to ILLiad and E-ZBorrow online catalogs by following Interlibrary Loan link at http://search.library.cmu.edu/

Other Useful Databases

- Links to many more databases, journal collections

- Lexis-Nexis

  - Massive catalog of legal sources – law journals, case law, news stories, etc.

- IEEE and ACM journal databases

  - ACM Digital Library http://dl.acm.org/
  - IEEE Xplore http://ieeexplore.ieee.org

- Google Scholar

  - http://scholar.google.com

- INSPEC database

  - Huge database of scientific and technical papers

- JSTOR

  - Arts & Sciences, Business, Mathematics, Statistics

And of course…

- Reference librarians are available at all CMU libraries, and love to help people find what they need – just ask!

Writing a Literature Review

Writing a literature review

- What is a literature review?

  – A critical summary of what has been published on a topic

    - What is already known about the topic
    - Strengths and weaknesses of previous studies

  – Often part of the introduction or a section of a research paper, proposal, or thesis

- A literature review should

  – be organized around and related directly to your research question

  – synthesize results into a summary of what is and is not known

  – identify areas of controversy in the literature

  – formulate questions that need further research

Dena Taylor and Margaret Procter. 2004. The literature review: A few tips on conducting it.
http://www.writing.utoronto.ca/advice/specific-types-of-writing/literature-review

Literature review do's + don'ts

- Don't create a list of article summaries or quotes

- Do point out what is most relevant about each article to your paper

- Do compare and contrast the articles you review

- Do highlight controversies raised or questions left unanswered by the articles you review

- Do take a look at some examples of literature reviews or related work sections before you try to create one yourself

  - See for example section 2 of http://cups.cs.cmu.edu/soups/2013/proceedings/a7_Leon.pdf or http://cups.cs.cmu.edu/soups/2013/proceedings/a12_Balebako.pdf

Course project

Project overview

- Individual or small group (up to ~4 students)

- Pick a project from the list of suggested projects

  - Talk to me if you want to propose something different
  - A project related to your thesis research or another project you are already doing is ok with me if approved by the other instructor and scope is large enough and appropriate for this class

- All projects have final paper and poster as deliverable

- Some projects may have other deliverables such as software, user interface designs, etc.

- http://cups.cs.cmu.edu/courses/pplt-fa13/project.html

Past projects

- Past course websites have information about past projects

- Several past projects have been turned into a thesis or published paper, some software projects have been released publicly or contributed to open source projects
  - And you are encouraged to think about that too

Fair Information Practices

Fair information practices

- What are FIPs?

- Why are they important?

Privacy terminology

- Data subject

- Data controller

- Secondary use of data

OECD fair information principles

- http://www.oecd.org/sti/ieconomy/privacy.htm

- Collection limitation

- Data quality

- Purpose specification

- Use limitation

- Security safeguards

- Openness

- Individual participation

- Accountability

US FTC simplified principles

- Notice and disclosure

- Choice and consent

- Data security

- Data quality and access

- Recourse and remedies

How do these differ from the OECD principles?

US Federal Trade Commission, Privacy Online: A Report to Congress (June 1998), http://www.ftc.gov/reports/privacy3/

Other privacy principles

- APEC privacy framework (2005)
  http://www.apec.org/About-Us/About-APEC/Fact-Sheets/APEC-Privacy-Framework.aspx

  – Designed to achieve accountable cross-border flow of personal information with APEC region

  – Includes implementation guidance

- Generally Accepted Privacy Principles (2009)
  http://www.aicpa.org/InterestAreas/InformationTechnology/Resources/Privacy/GenerallyAcceptedPrivacyPrinciples/

  – Designed by and for CPAs

  – Includes detailed controls and procedures

The Prada NYC dressing room

© Michael Moran

- http://www.quantumglass.com/node/11/concept/3

- What aspects seem privacy invasive?

- How could the design be changed to reduce privacy concerns?

Applying the FIPs

- Google Street View

- Gmail advertising

- Publicly accessible web cams

- Amazon.com book recommendations

- Giant Eagle Advantage Card

- Transportation Security Administration watch lists

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