Center for
**LifeLong
Learning
& Design**

University of Colorado at Boulder

**Wisdom is not the product of schooling
but the lifelong attempt to acquire it.
- Albert Einstein**

Resources and Requirements

**Gerhard Fischer and Hal Eden
Fall Semester 2007
Course information environment (SWIKI):
http://swiki.cs.colorado.edu:3232/phd-intro-2007/**

October 3, 2007

PhD Areas of Study — Old

- Artificial Intelligence

- Database Systems

- Numerical Computation

- Operating Systems

- Parallel Processing

- Programming Languages

- Software Engineering

- Theory of Computation

PhD Areas of Study — New

- Bio and Medical Informatics

- Computational Modeling of Human Cognition

- Computational Science

- Computer Architecture

- Database Systems

- Digital and Social Systems

- Distributed and Network Computing

- Machine Learning

- Machine Vision

PhD Areas of Study — New

- Numerical and Scientific Computation

- Operating Systems

- Programming Languages

- Robotics

- Security

- Software Engineering

- Speech and Language Processing

- Theory

Feedback from Students about Finding and Access to Information Sources

CiteSeer

- Guy: One of the obvious strengths of CiteSeer is the fact that it provides the number of citations for a particular article along with the aricle itself. This is helpful in that it addresses a question asked earlier in the course about how one knows whether a particular article is worth reading or not. A reasonable metric for this would be the number of citations a particular article has. The more citations then the more likely that the article is a fundamental one to the topic and therefore worth reading. The graph of citation count and other metadata about the article is also very helpful in determining the context.

- Mohammad: Citeseer is the most flexible when it comes to rating, reviewing and updating, just like a wiki. it is the most powerful in citation, and it provides many features: you can find related documents, similar documents, and citation graph analysis to name a few.

- Nwanua: "CiteSeer has not been comprehensively updated since roughly 2000. It should not be used as a representative sampling of current research."

ACM Digital Library

- several students: it is important to mention that unlike the previous two it isn't free.

- several students: Bibtex and Endnote formats were available, and authors were linked to all of their publications.

- Paul: of the three different search engines the ACM portal was my least favorite. However, it was not without its strengths. It seemed that the ACM Portal most often had direct links to the full documents (perhaps only due to a CU subscription).

- Jeff: One extremely nice feature is the binder, which allows you to save articles and other information for future use.

- KyuHan: ACM digital library is the best organized search engine among these three search engines, but it is limited for ACM publications.

ACM Digital Library

- David: You can personalize the search page for yourself, browse the library, provide feedback, and link to help pages.

- Yuli: The search results are limited to the computer science literature published by ACM or its associate. Therefore, it provides neater information but, at the same time, the inter-discipline researcher (such as computational biology) might think it's not enough to search by only ACM library. It's a very good thing that it links to the full-version .pdf article. But, since I'm not a member of ACM, I can only get it free in campus or need to pay for it otherwise.

Google Scholar

- Google Scholar seems to be the best of the three search tools for locating research information, but the other two can be used to keep the search space smaller.

- Saroch: Google bot craws almost every web page in the whole world. Thus, it includes almost every paper or article related to what we are interested in. The downside is that it also includes the papers that are not published or not trustable so we should examine the origin of the papers before we reference them. However, reading lots of papers might broaden our viewpoints and can help us come up with the new ideas or accidentally discover the new things.

- Lee: While this is not flawless, it does allow you to quickly obtain a sampling of notable papers for a given topic.

Google Scholar

- David: Google had the best help system. Returns links from the other engines, for example from ACM Digital Library.

- Dan: Free, thorough, and accurate. Even includes papers not hosted on official academic sites (could be an advantage or a disadvantage). Also has full-featured advanced search, including the function to indicate in which field to perform the search.

- Holger: When the user doesn't know what exactly S/he is looking for, google scholar is a big help.

Endnote and BibTeX

- Endnote — from Wikipedia:
  - EndNote is a commercial reference management software package, used to manage bibliographies and references when writing essays and articles. It is made by Thomson ISI ResearchSoft. The current version is 11 (EndNote X1).
  - There are several ways to add a reference to a library: manually, exporting, importing, connecting from EndNote.
  - The user is expected to know something about the citation style wanted

- Endnote: a Web 2.0 system?

- BibTeX from Wikipedia:
  - a tool for formatting lists of references. The BibTeX tool is typically used together with the LaTeX document preparation system.