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# INFSCI 3005: Introduction to Doctoral Program

## Lecture 6: Reference and Search Tools

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With materials and inspiration from professors  
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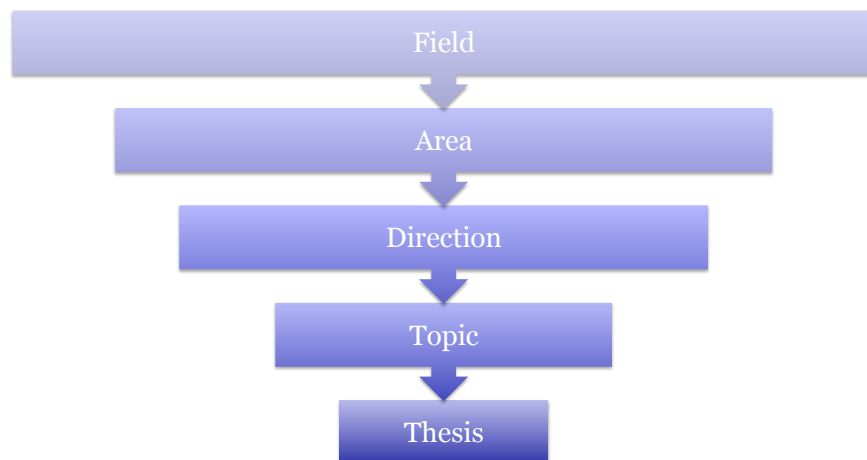
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### Working with research literature: When?

- To start exploring the field
- To look for research ideas and things to do
- To find similar works for a project or a paper
- To prepare review part of your thesis
- To choose next research goals



## Stages of the Doctoral Study



## Working with research literature: Needs

- Find introductory books, textbooks
- Find research papers on a specific subject
- Find papers of a specific author or team
- Evaluate an impact of various research papers
- Organize your paper collection
- Organize your references
- Manage citations when writing a paper (thesis)
- Share references with co-authors and groups



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## The Library

- One of the most valuable local resources
  - SIS Library
  - Main Pitt Library
  - Carnegie Library
- Interlibrary loan
- Reserves
- Local delivery
- Search tools: <http://pittcat.pitt.edu/>



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## Digital Libraries

- Digital Libraries of professional societies
  - ACM: <http://portal.acm.org/>
  - IEEE CS: <http://www.computer.org/portal/>
  - IEEE: <http://ieeexplore.ieee.org/>
- Digital content from leading publishers
  - Springer: <http://www.springerlink.com/>
  - Taylor and Francis: <http://www.informaworld.com/>
  - Elsevier: <http://www.sciencedirect.com/>
- Free access from Pitt and with VPN



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## Classic Citation Indexing Services

- History of Abstracting/Citation indexing
- ISI Web of Science (now Thomson Reuters)
  - Maintains Science/Social Sciences/Humanities Citation Index
  - Allow to search for both sources and citations
  - Calculates journal *Impact Factor*
- Elsevier Scopus: <http://info.scopus.com/>



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## Global Search Tools and Archives

- CiteSeer: <http://citeseer.ist.psu.edu/>
- Google Scholar: <http://scholar.google.com/>
- CiteSeerX: <http://citeseerx.ist.psu.edu/>
- Microsoft LIBRA: <http://libra.msra.cn/>
- Scirus: <http://www.scirus.com/>
- DBLP:  
<http://www.informatik.uni-trier.de/~ley/db/>



## Managing Citations on your PC

- EndNote: <http://www.endnote.com/>
  - Citation management, paper processing, some collection management tools
  - Also ProCite and other tools
- BibTex
  - Universal format for citation management using LaTeX
- Online Citation Management
  - RefWorks: <http://www.refworks.com/>
  - EndNote Web: <http://www.endnoteweb.com/>
- Zotero: <http://www.zotero.org/>
  - Free extension that can be downloaded and installed in a Firefox browser



## Citation Bookmarking and Sharing

- Allows you to collect and share citations online
  - Citation scrapping when adding to database
  - Tagging for citation organization
  - Import/Export to your collection (EN & BibTeX)
  - Groups for collaborative work
  - Finding papers from people with similar interests
- Main services
  - CiteULike: <http://www.citeulike.org/>
  - BibSonomy: <http://www.bibsonomy.org/>
  - Connotea: <http://www.connotea.org/>



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## Managing Sources on your PC

- EndNote
  - Simple source archiving (images, papers)
- Papers: <http://mekentosj.com/papers/>
  - Source management
- Mendeley: <http://www.mendeley.com/>
  - Bringing it all together
  - Managing paper sources, bookmarking, collaboration, integration with Web site



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## What to use?

- Books
  - Library, Amazon (used books!)
- Finding papers
  - Scholar, ACM DL, CiteULike (Bibsonomy)
- Getting papers
  - ACM DL, IEEE, Publishers, CiteSeerX, Scholar, e-mail
- Investigating impact
  - Scholar, ISI, CiteSeerX
- Managing your citations and paper processing
  - CiteULike (Bibsonomy) with EndNote or BibTex