

Searching for Scientific Documents & Managing References

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A large variety of tools specialized in searching for scientific documents exist:

1. Bibliographic databases

- a. Web of Science (WOS)
http://wokinfo.com/products_tools/multidisciplinary/webofscience/
 - i. University of Nantes is not licensed, so we cannot use it
- b. Scopus (<http://www.scopus.com>)
 - i. University of Nantes is not licensed, so we cannot use it
- c. Science Direct (<http://www.sciencedirect.com/>)
- d. Springer Link (<http://link.springer.com/>)
- e. ACM DL (<http://dl.acm.org>)
- f. IEEExplore (<http://ieeexplore.ieee.org/Xplore/guesthome.jsp>)

2. Google scholar

3. Open access databases

- a. arxiv, Hal : searching for articles, set-up alerts
 - i. <http://hal.univ-nantes.fr>
 - ii. <http://hal.archives-ouvertes.fr/UNIV-LYON2/en/>
 - iii. <http://hal.upmc.fr/>

4. Social networks

- a. Identifying research blogs (if they exist)
 - i. using a search engine (Google)
 - ii. using catalogs of blogs
 - (e.g. <http://www.kdnuggets.com/websites/blogs.html>)
- b. Following researches / hashtags on Twitter:

5. Reference management tools

- a. Zotero
- b. Mendeley
- c. JabRef

The main objective of this tutoring session is to help you to start using these tools for your research work. During this second semester each DMKM student is supposed to work with one of his colleagues on a large project. As these projects may cover a large variety of subjects, each student (or couple of students) will do the following exercises on his own subject. If there are students that are not implied in any project, please ask your local tutor for a research subject.

Exercises

1. Search for scientific articles that are relevant for your research problem. Use the advanced search features of the different search engines (Google Scholar, Springer Link, Science Direct) to discover
 - a. When were published the first papers that concern your problem?
 - b. When were published the last papers that concern your problem?
 - c. In which conferences / journals / workshops were published most of these papers? Is there any conference / journal or workshop dedicated to your research problem?
 - d. Which researchers published the largest number of papers relevant to your problem?
 - e. Who are the researchers with the largest H-Index that published papers relevant to your problem? Are they the same as for the previous question?
2. Based on the observation made in the previous exercise, select five papers that seem to be the most important for your problem.
3. Search for the complete content of these five papers (the pdf document). It is available for free? If not, how can you obtain it? Are they available on Research Gate?
4. Look for other papers published by the authors of the five selected papers and that may cover aspects relevant to your research problem. Their content is available for free?
5. Verify if the authors published preprint versions of the five papers on one open access database (HAL, ARXIV). Compare the content of the preprinted version with the final document.
6. Create accounts on Science Direct, Springer Link and/or Google Scholar and set up alerts so that you will be informed when new papers are published by the authors of the five papers.
7. Do any of these researchers maintain / publish on a scientific blog? Can you find a scientific blog that covers aspects related to your project?
8. If you do not have a Twitter account, create an account. Verify if the authors of the selected papers have twitter accounts and follow them. Do your teachers have Twitter accounts? Follow one of them (at least one of your teachers).
9. Search for a conference (ideally, in computer science) that takes place today and follow it in live using Twitter.
10. There is any Twitter #hashtag that corresponds to your research problem?
11. Verify if the authors of the five selected papers are presents on LinkedIn and / or Research Gate. Are they members of several groups that may be relevant for your research problem? Create accounts and join these groups.
12. Create an account on Zotero. Install Zotero on your computer and browser and try to automatically import the references of the five selected papers.
13. Create a group where you will share with your colleagues your bibliography related to "*the future of the research*".
14. Install the Zotero extension for *Microsoft Office* or *Open Office* and write a short paragraph where you will cite the five papers. Test the different citation styles that are proposed and generate the bibliography.