

USEFUL DATABASE AND WEB RESOURCES FOR SEARCHING INFORMATION

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OBJECTIVE: To teach students to search for the most up to date information in a topic.

TARGET AUDIENCE:

- Undergraduate students can find the latest information of a topic. It is useful if you wish to learn more from self study. You can find out newly published information, e.g. one day old information. On the other hand, information from books may be several years old.
- Final year project students can also acquire this skill. This helps you to conduct your literature survey in your project.
- Research students can familiarize with how to search the latest information in journals and conferences, and what to do when the item is not available. This helps you to conduct your literature survey and to keep track of what is just published.

INTRODUCTION

1. The databases are useful if you are working in the field of Science and Engineering. If you are working in other fields (e.g. Social Science, Philosophy), there are other relevant databases. Ask a Librarian or a teacher working in your field.
2. Knowing how to use these databases and web resources is essential for your research or information collection in final year projects.
3. These databases and web resources help you to find the latest information on a particular topic. These are the most recent knowledge, one day old information. On the contrary, the information in your text book is usually several years old.
4. Sometimes, you can get even more recent information. Soft copies of accepted papers may be downloadable from a journal home page; preprints may be obtained directly from the author or available in the web; technical reports are published by major laboratories e.g. Santa Fe Institute; some submitted papers are available in arxiv; the peer grapevine network can also be helpful.

WHERE ARE THE DATABASES?

Go to CityU Library Home; Under “E-Resources”. Select “Databases”

DATABASES

Scopus is a useful database containing articles in science and engineering
<http://www.scopus.com/home.url>

- A very useful feature is the links to papers that have cited the work. One can find very up to date information this way.

WEB RESOURCES

Wikipedia is a free online dictionary that is useful for getting an overview of a technique.
http://en.wikipedia.org/wiki/Main_Page

- If you wish to start learning a new topic, reading the Wikipedia is a good idea.

Google Scholar
<http://scholar.google.com.tw/>

- A very useful feature is the links to papers that have cited the work. One can find very up to date information this way.
- If you set up a profile and specify your interests, Google scholar will recommend papers to you.

Semantic Scholar
<https://www.semanticscholar.org/>

- A very useful feature is the links to papers that have cited the work. One can find very up to date information this way.
- It uses AI to help you find papers.

HOW CAN I GET THE PAPER/BOOK

Most papers can be downloaded within the CityU library. If you cannot obtain a paper, you can request it through inter-library loan services. Ask a librarian.

Apart from CityU library, books can also be borrowed from other Hong Kong University libraries through HKALL.

HINTS

1. Good searching skills is very important. Consult the online tutorial of the database/web resources on how to construct good search operators.
2. Familiarize with the use of logical operators: AND, OR, NOT, (), “ ”, SAME and wild card characters * , \$, ?.

Example 1

wavelet*

means search any word that begins with wavelet.

Example 2

ant\$

means there is zero or one character in the \$ position. So it can search for both “ant” and “ants”.

Example 3

ant?

means there is exactly one character in ? position. So it can search for both “ants” and “antz”.

Example 4

(genetic algorithm* OR evolutionary*) AND (neural network*)

searches for “genetic algorithm*” or “evolutionary*”, and the results must also contain “neural network*”. For Web of Knowledge, the order of precedence is NOT > AND > OR. Try () if you wish to change the order of precedence.

Example 5

“genetic algorithm design rule”

The exact wording must appear in the text.

Example 6

bear SAME cat

means that in a sentence, after “bear” appears, “cat” also appears within the same sentence.

3. One effective way to get a feel of the latest development is to look up an important paper, then look at the cited references. The database/web resource will give you a list of papers that has cited this paper in their reference list.

Then you can read the most recent relevant papers about the technique developed from the original paper.

4. Usually, an important paper has a lot of citations. Of course, this rule does not apply to important papers that are just published – it takes awhile for the first citation to appear. To identify those papers, you need to consult your professor, knowledgeable colleagues or your own peer network.
5. Another way is to search for the latest survey paper in the field.

USEFUL LINKS

CityU library research guide: <http://libguides.library.cityu.edu.hk/>