Finding Articles, Patents, and Standards

Engineering Library Homepage

library.columbia.edu/locations/engineering.html

Finding Articles

Article databases and indexes – full text content, citations and abstracts

- Engineering Village
- Web of Science
- CLIO/LWeb

If we don't own it – ILL (Interlibrary Loan)

Search tips: unknown item searching

- Brainstorm some search terms start broadly and gradually refine results
 - Look at controlled vocabularies, indexed keywords in other articles
 - Start off searching in topic, keyword and title fields
- Use AND, OR and NOT to combine and build more powerful searches
 - Usually can be used in search boxes, or as drop down menu options
 - You can also use SAME to find two words/phrases appearing in the same sentence
- Use "quotation marks" for exact phrases
- Use * to find plurals and variants (*celeration will find acceleration and deceleration; child* will find children, childhood). Very useful for author searching when used w/ first initial.
- Citation chasing use the bibliographies of useful articles you find to find other articles and authors to search
- Cited by most databases will now give you information on articles that cite the article you are looking at. This is very useful not only in finding other relevant research, but also in gauging how influential that work has been in the field.

Finding Patents

Patents, Standards, and Reports

library.columbia.edu/locations/engineering/patents.html

Google Patent Search

www.google.com/patents?hl=en

Espacenet

worldwide.espacenet.com/advancedSearch?locale=en EP/









Finding Articles, Patents, and Standards

Derwent Innovations Index

www.columbia.edu/cgi-bin/cul/resolve?AUL4112

Search tips: basic strategy

Step 1: Keyword search in Patent Index

Step 2: Identify important classifications

Step 3: Search granted patents and/or patent applications

Step 4: Review documents

Step 5: Check cited and citing references

Step 6: Repeat from Step 3.

Finding Standards

What?

A standard is a document that provides requirements, specifications, guidelines, or characteristics that can be used consistently to ensure that materials, products, processes, and services are fit for their purpose.

Why?

- Understanding
- Guidance
- Reliability
- Safety

- Quality
- Trust
- Interoperability

When?

The important thing to remember is that standards change. Make sure you pay attention to when the standard was created and if it has been updated. For research purposes, you may be interested in historical standards.

Where?

- IEEE Institute of Electrical and Electronics Engineers www.columbia.edu/cgi-bin/cul/resolve?AQN4436
- NISO National Information Standards Organization www.columbia.edu/cgi-bin/cul/resolve?clio5459659
- W3C World Wide Web Consortium www.w3.org/standards/

Who?

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For more information on *Patents, Technical Reports, and Standards*: library.columbia.edu/locations/engineering/patents.html









