

Finding Technical Information Over the Internet

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Finding Technical Information Over the Internet

- ◆ We've used the usual search engines to find everything from chicken soup to Lyme Disease
- ◆ Some technical information is not searchable through the usual search engines — particularly not refereed publications and conference proceedings.
- ◆ There *are* Internet-available sources for these, if you know where to look
- ◆ They aren't always free

Introduction to Searching

- ◆ Granularity
- ◆ Boolean Logic
- ◆ Controlled vocabularies
- ◆ Key words
- ◆ Field searches

Sample Searches

◆ Fly-By-Light Control (*aircraft control systems based on fiber optics*)

- MSN Search fly-by-light control
- Google fly-by-light control
- Yahoo! fly-by-light control
“fly-by-light control”
- Lycos fly-by-light control
“fly-by-light control”

Sticking Points

- ◆ Some very general articles
- ◆ Some items not specifically about fly-by-light control
- ◆ Some items not refereed

Other Places to Search

◆ Primary Publishers

- Wiley, Kluwer, Springer, et al.

◆ Data Originators

- Universities, Professional Societies, etc. (*note: some of these are also primary publishers*)

◆ Data Aggregators

- World of Science, etc.

◆ Database Publishers

- CSA, Ei, etc.

◆ Database Aggregators

- CSA, Ovid, DIALOG, etc.

Primary Publishers

- ◆ Search by publication type, or by individual publication
- ◆ Can't usually search the entire archive at once
- ◆ Don't usually have advanced search capabilities
- ◆ Abstracts may be available free; for more info you have to register and/or pay

Data Originators

- ◆ Can't search across authors/originators
- ◆ Authors' papers may not have been peer-reviewed yet
- ◆ As much or as little info as the originator chooses to make available
- ◆ May be closed to anyone outside the originating institution
- ◆ May require registration and/or (additional) payment

Data Aggregators

- ◆ “Info-chunked”
- ◆ Pay by the piece
- ◆ Can sometimes search by image or by bibliography
- ◆ Can usually search across publishers and across databases

Database Publishers

- ◆ As good as the primary info, and the A&I (abstracting and indexing) staff
- ◆ Documents reviewed before inclusion in database
- ◆ Full-text and document delivery may or may not be available
- ◆ Payment required, usually either subscription or transactional
- ◆ Subscriptions and transactions aimed primarily at academic and corporate libraries

Database Aggregators

- ◆ Can sometimes search across databases, even from different publishers
- ◆ Full-text and document delivery may or may not be available
- ◆ Payment required, usually either subscription or transactional
- ◆ Subscriptions and transactions aimed primarily at academic and corporate libraries.
- ◆ Other value-added services may be available.

More Sample Searches

- ◆ Wiley Interscience Can search content
- ◆ Elsevier Can search titles only
- ◆ Springer Can search content
- ◆ IEEExplore
- ◆ CSA
- ◆ DIALOG

Links

◆ Primary Publishers

- Wiley <http://www.wiley.com>
 - ◆ Wiley Interscience <http://www3.interscience.wiley.com>
- Kluwer <http://www.kluweronline.com/>
- Springer-Verlag <http://www.springer.de>
- Elsevier <http://www.elsevier.com>
 - ◆ ScienceDirect <http://www.sciencedirect.com>
- Nature Publishing Group <http://www.nature.com>

Links

◆ Data Originators

■ Professional Societies

- ◆ Institute of Electrical and Electronics Engineers (IEEE)
<http://www.ieee.org>
 - IEEExplore <http://ieeexplore.ieee.org>
- ◆ American Institute of Aeronautics and Astronautics (AIAA) <http://www.aiaa.org>
- ◆ American Society of Mechanical Engineers (ASME)
<http://www.asme.org>
- ◆ American Meteorological Society <http://www.ametsoc.org>

Links

◆ Data Originators

- Professional Societies (cont'd)
 - ◆ American Association for the Advancement of Science
 - Science Magazine <http://www.sciencemag.org>
 - ScienceNOW! <http://sciencenow.sciencemag.org>
 - ◆ Society of Photo-Instrumentation Engineers (SPIE)
<http://www.spie.org>
 - ◆ Institute of Physics (IOP) <http://www.iop.org>
 - ◆ American Chemical Society <http://www.cas.org>
 - ◆ Society of Automotive Engineers (SAE)
<http://www.sae.org>

Links

◆ Data Originators

■ Universities

- ◆ In the United States, usually <http://www.name-or-initials.edu> where “name-or-initials” is replaced by the specific university’s identifier.
- ◆ In Europe and Asia, usually <http://www.name-or-initials.ac.tld> where “name-or-initials” is replaced by the specific university’s identifier and “tld” is replaced by the two-letter Top Level Domain for that country. (e.g., University of Tokyo <http://www.u-tokyo.ac.jp>)

Links

◆ Database Publishers and Aggregators

- Cambridge Scientific Abstracts (CSA) <http://www.csa.com>
- DIALOG <http://www.dialog.com>
- Ovid Technologies <http://www.ovid.com/site/index.jsp>
 - ◆ Silver Platter
http://www.ovid.com/site/products/tools/silverplatter/access_to_ls.jsp?top=2&mid=3&bottom=8&subsection=15
- Elsevier
 - ◆ Engineering Information (Ei) <http://www.ei.org>
- Chemical Abstracts Service (STN)
<http://www.cas.org/stn.html>

Cambridge Scientific Abstracts

- ◆ CSA is a privately-owned information company located in Bethesda, Maryland with offices in Hong Kong, France, and the UK. CSA has been publishing abstracts and indexes to scientific and technical research literature for over 30 years.
- ◆ Information about CSA and its products may be found on the Web at <http://www.csa.com>. The sales representative for New York, New Jersey, and Pennsylvania is Chris Vander Groef. He can be reached by e-mail at cvandergroef@csa.com.