

Introduction to Library Resources in Computer Science

Autumn Quarter 2007

Welcome to Stanford! This handout is aimed at those who are new to Stanford and is designed to highlight some of the library resources available in computer science. It is intended as a supplement to the pamphlet describing the Mathematical and Computer Sciences Library and its services, <http://mathcslibrary.stanford.edu>, (available at the library).

Socrates, The Library Catalog

<http://catalog.stanford.edu/>

This **IS** the place to find out what books, journals, and technical reports are owned by the Stanford University Libraries (SUL).

This **IS NOT** the place to look for journal, magazine, or newspaper articles (you will need to use an article index or database such as Inspec for this).

There are two ways to search: Simple and Combined. You can also browse by call number and search for electronic resources (but NOT online journal articles). Online help is available for all search methods.

- TIP: the truncation symbol in Socrates is **\$**, e.g., **comput\$** finds any word beginning with this stem, including computer, computers, computing, etc.
- TIP: to search for a numbered series such as Lecture Notes in Computer Science (LNCS), type the series title and the volume number and click on the "Title" button.
- TIP: for information on locating technical reports, see <http://library.stanford.edu/collect/techrpt.html>

If you run into problems using the catalog, let us know by clicking on the Ask Us button at the top of the page. Feedback is always welcome.

Online Library resources

Article/Conference Paper Indexes

<http://library.stanford.edu/catdb/alldata.html>

ACM Online Guide to Computing Literature

<http://portal.acm.org> (click on "Go to The Guide")

This is a substantive bibliographic database from the key publishers in computing, including books, journals, conference proceedings and theses. Browsing by author,

subject, and type of publication is available. Links to the full text are provided when available.

INSPEC on the Web

<http://search.lanl.gov/ssplus/jsp/AdvancedSearch.jsp?collection=ins>

INSPEC is the premier database in the world that indexes the literature of physics, electronics, and computing. Coverage online is available from 1898 to the present. The database is hyperlinked across records and indexes, as well as to full-text journals of IEEE, IOP, AIP, and others.

Engineering Index (EI) on the Web

<http://search.lanl.gov/ssplus/jsp/AdvancedSearch.jsp?collection=eix>

Engineering Index, also known as EI/Compendex, indexes articles in engineering, including computer engineering. Online coverage is available from 1884 to the present.

SciSearch (Science Citation Index)

<http://search.lanl.gov/ssplus/jsp/AdvancedSearch.jsp?collection=sci> or <http://isiknowledge.com> (select ISI Web of Science)

Although articles indexed in SciSearch are from 1900 to the present, references cited by these articles may be from earlier years. Use the Cited Reference Search screen to browse by cited author. Unfortunately, coverage of computer science journals in SciSearch has been historically poor compared to other areas of research.

Flashpoint

<http://flashpoint.lanl.gov/>

Flashpoint is a multi-database search tool that allows you to search BIOSIS, the citation databases (Arts & Humanities, Social Science, and SciSearch), Engineering Index, INSPEC, MathSciNet, and PubMed in one search.

Journal Citation Reports (JCR)

<http://isiknowledge.com>

Journal Citation Reports, the database of comprehensive statistical information on journal relevance and relative importance (including impact factors), is available via the ISI Web of Knowledge. The data used is drawn from citation indexes such as SciSearch. The JCR Web Science Edition covers roughly 5000 journals for issues published 1998-2006. Earlier years are available on microfiche (MFICHE 1815) and CD-ROM at the Physics Library. **NOTE:** JCR does *not* cover conference proceedings.

Online Computing Reviews Service

<http://www.reviews.com>

The goal of this service is to provide expert critiques of published articles and books in the computing disciplines in a timely manner, and to stimulate online discussion between the reviewer and readers. Updated daily.

Free Computer Science databases

CiteSeer

<http://citeseer.ist.psu.edu/>

Originally produced by the NEC Research Institute, this is an autonomously generated digital library and citation index of the scientific literature, concentrating on computer science. It has over 750,000 documents and over 5 million citations. It features indexing of the full text of entire articles and citations, and provides the context of citations to a given paper.

Collection of Computer Science Bibliographies

<http://iinwww.ira.uka.de/bibliography/index.html>

This is a collection of about 1500 bibliographies of computer science literature from various sources, covering most aspects of computer science. These bibliographies are updated monthly from their original locations and converted to BibTeX format in a standardized layout. The search interface allows you to search all bibliographies at once. You can also browse the bibliography collection by subject. The collection contains more than 2 million references, mostly to journal articles, conference papers and technical reports. More than 600,000 references contain cross-references to citing or cited publications. More than 1 million references contain URLs to an online version of the paper. There are more than 2000 links to other sites carrying bibliographic information.

DBLP Computer Science Bibliography

<http://www.informatik.uni-trier.de/~ley/db/>

The DBLP server provides bibliographic information on major computer science journals and proceedings. Initially focused on database systems and logic programming, it is gradually being expanded toward other fields of computer science. As of September 2007, the server indexes more than 930,000 articles and contains several thousand links to home pages of computer scientists.

Computing Research Repository (CoRR)

<http://arxiv.org/corr/home>

Co-sponsored by ACM, arXiv.org, NCSTRL, and AAI, CoRR includes preprints and other documents in a variety of areas in computer science.

Full-text Resources Online

Journals & Conference proceedings

<http://www.tdnet.com/stanford>

ACM Digital Library

<http://www.acm.org/dl/>

The subscription to the ACM Digital Library includes online journal articles beginning with volume 1 and conference proceedings as far back as 1973. Many papers appear online before the print issue is available in the library. Part of the ACM Portal: <http://portal.acm.org>.

IEEE Xplore (IEEE/IEE Electronic Library)

<http://ieeexplore.ieee.org>

The subscription to the IEEE/IEE Electronic Library (IEL) via the IEEE Xplore interface includes journal articles, conference proceedings, and standards published by the IEEE and IEE from as far back as 1985 to the present. The IEEE is working to include journal articles online back to volume 1, issue 1.

Other journals available online

Other journals available online at Stanford include those published by:

- Elsevier
- SIAM
- Springer
- Wiley

If you don't find the electronic journal you're looking for on the list of available e-journals or in Socrates, ask us if the journal is available online. However, we have many journals that are only available in print. If we don't have a copy of the journal article you need, we can usually obtain it from other sources.

Online books

<http://library.stanford.edu/depts/serg/collect/SciEngETexts.html>

Lecture Notes in Computer Science (LNCS)

<http://www.springerlink.com/link.asp?id=105633>

We will soon have all volumes from the Springer book series Lecture Notes in Computer Science and Lecture Notes in Artificial Intelligence available online. Most of these are conference proceedings.

Safari Tech Books Online (O'Reilly only)

<http://proquest.safaribooksonline.com/?uicode=stanford>

Selected computer books published by O'Reilly are available online via ProQuest's Safari service. Print copies are often available for checkout at the Math/CS Library. Limit of 7 simultaneous users. (If asked for a username

and password, find the link to connect to Safari as part of an academic license just below the subscriber log-in.)

Stanford Dissertations (1987-)

Stanford University dissertations from roughly 1987 to the present are freely available online to the Stanford community under an agreement with ProQuest. See the SUL Dissertations page at

<http://library.stanford.edu/depts/ssrg/econ/dissertations.html> for instructions.

Books24x7

<http://library.stanford.edu/books24>

The ITPro collection at Books24x7.com is composed of many popular computer technical books from a variety of publishers (except O'Reilly). There are also books on computers and society and e-commerce. There's no need to register unless you want to personalize the site using the "My Bookshelf" feature.

ebrary (requires free reader)

<http://site.ebrary.com/lib/stanford/>

Ebrary is an online book service covering a wide range of subjects, including computer networks and computer security. Requires a reader which can be downloaded from the site. (If you decide to browse the collection, go to Science – Mathematics – Instruments and machines – Electronic computers. Computer science.)

MyiLibrary

<http://www.myilibrary.com/browse/open.asp>

A collection of many of the e-books published in 2005-07 from Springer, Taylor & Francis, Oxford and Cambridge University Presses, as well as intergovernmental publications from the International Atomic Energy Agency, the International Labour Organisation, and others.

There's no need to create an account, unless you wish to take advantage of the full functionality at the site. (If you decide to browse the collection, go to Science – Mathematics – Instruments and machines – Electronic computers. Computer science.)

Synthesis

<http://www.morganclaypool.com/page/synthesis.jsp>

This is a collection of 50- to 100-page self-contained "lectures" which synthesize important research and development topics, written by prominent contributors to the field of engineering and computer science.

Knovel

<http://www.knovel.com/knovel2/default.jsp>

Some of the most important engineering and scientific online handbooks are included in this collection, such as

the CRC Handbook of Chemistry & Physics. A powerful interface enables users to search across text, tables, numeric, data, graphs, and equations. Tables, graphs, and equations are interactive.

CogNet

<http://cognet.mit.edu/library/>

MIT CogNet™ Library Edition, a searchable collection of electronic texts for cognitive and brain sciences and related fields is available to Stanford users on the Web. Intended as an online community for the cognitive and brain sciences, people on the Stanford network can access full-text articles and books in these subjects, find links to other reference tools on the Web, and participate in online discussion groups. More content is added on a regular basis. Registration is not required unless you wish to personalize your "Workspace" at the site or to access members-only profile information.

Technical Reports and Preprints

Virtual Technical Reports Center

<http://www.lib.umd.edu/UMCP/ENGIN/TechReports/Virtual-TechReports.html>

There are many preprints and technical reports available for free online. This metasite lists institutions that provide either full-text reports or searchable extended abstracts of technical reports on the World Wide Web and contains links to technical reports, preprints, reprints, dissertations, theses, and research reports of all kinds.

Technical Reports Owned by the Stanford University Libraries

The Math/CS Library has a large collection of technical reports received on exchange from other universities and industry, as well as those produced on the Stanford campus. These are cataloged in Socrates and are shelved in the Storage Area of the library. More recent reports are usually found on the Web.

Here are a few selected Stanford sites to help you locate CS technical reports:

CS Department Technical Reports

http://mathcslibrary.stanford.edu/research_help/guides/techreports.html

Stanford Medical Informatics

<http://www.smi.stanford.edu/pubs/index.html>

Scientific Computing/ Computational Mathematics Program (SCCM)

<http://www-sccm.stanford.edu/wrap/publications.html>

Library Services

Your Circulation Records on the Web

Stanford users with a SUNet and a University ID can find out what items they have checked out from the Stanford libraries on the Web. Records for items checked out from the Jackson Business Library, Lane Medical Library, and the SLAC Library are NOT available.

This service, "My Account," also allows you to renew eligible items online (a maximum of 2 renewals per item), view outstanding bills and bills previously paid or cleared, and look at the status of items requested for hold or recall. Renewals using this service take effect immediately, unlike email renewals, which usually take about 24 hours to process.

To use this service, click on the "My Account" button on the SUL/AIR Web page at <http://library.stanford.edu/>.

Hold/Recall requests via Socrates

If you find that an item you want is checked out when you look up its record in Socrates, you can request that a hold or recall be placed on the item by clicking on "Request this item." You will be asked to fill out an online form (SUNet ID required). When the item has been returned to the library, you will receive an email notifying you of its availability and giving you 7 days to pick it up.

Please note that if the title is on reserve, it cannot be held or recalled for you.

A **HOLD** does not affect the current loan period; it simply puts you in line for the item after it has been returned. A hold can be placed on any item whose loan period is one day or longer.

A **RECALL** shortens the current loan period and requires the user who has the item to return it within 7 days or face stiff overdue fines. Recalls cannot be placed against an item whose loan period is 14 days or shorter; place a hold for those items instead.

Paging from storage (SAL1&2 and SAL3)

Due to limited shelf space in the Math/CS Library, a significant fraction of the collection is housed at the Stanford Auxiliary Libraries, SAL1&2 and SAL3 (off-site storage). These are generally lesser-used books, journals and theses.

If something you need is at SAL1&2, you can either go there yourself to 765 Pampas Lane (across from the Stanford Federal Credit Union; the C shuttle to California Avenue stops nearby), or you can page the item for delivery to the Math/CS Library (or any other branch of your choice). All SAL3 items must be paged.

To page an item from SAL1&2 or SAL3, search for the book or journal in Socrates, click on the "Request this item" link, and fill out the form. Requests for items from SAL1&2 submitted before 1 p.m., Monday - Thursday, will usually be available for pick up on the next day after 11 a.m. at the Math/CS Library. Requests placed after 1 p.m. on Thursday will be available for pickup the following Monday after 11 a.m. Requests submitted after 1 p.m. on Friday or on weekends will be available the following Tuesday after 11 a.m. Items from SAL3 generally take an extra day. You will receive a pickup notice via email or U.S. mail when the item is available.

Interlibrary Services

If a Stanford University library doesn't have the book, dissertation, technical report, or journal you need, you can request that the library get a copy of the article or borrow the item from elsewhere. Request forms are available online at:

http://library.stanford.edu/services/interlibrary_services/doc_delivery_forms.html

(SUNet ID required). Or go to the Math/CS Library's Web page and click on "Interlibrary Services" where you will find a link to the forms.

If the item is available at UC Berkeley, you can request the item yourself using the online RLCP forms (graduate students and faculty only). Only use these forms to request items that the Stanford libraries do not own. To search UC Berkeley's online catalog (Pathfinder), go to: <http://sunsite5.berkeley.edu:8000/>.

Suggesting books or journals for the library

Is there a book that you think the library should have in its collection? Is there a journal that you think the library should subscribe to? You can recommend a book or journal to be purchased for the library online at

<http://library.stanford.edu/newitem> (SUNet ID required).

You can also link to this form from the Math/CS Library home page, or the Socrates home page.

However, you may still continue to send your recommendations and comments directly to Linda Yamamoto at linday@stanford.edu.

We're here to help

For questions and comments about these and any other library resources, including tours and instruction, feel free to contact Linda Yamamoto at the Math/CS Library, linday@stanford.edu, x3-0864, or stop by the library and we'll do our best to help you find what you need.