

Computer science information resource guide

Introduction

The Moore Library

The Moore Library houses the current working collections of the University Library in computer science, as well as mathematics and allied physical sciences. The Library acquires material to support both research and teaching activities in these subjects.

A large collection of older print material is retained at the main [University Library](#) building on West Road.

Help and advice

Advice on the use of the Library, its collections, or any information-based issue may be obtained from the Library's subject specialist staff, who can be contacted on (01223 7) 65676/7 or moore-library@lib.cam.ac.uk. Sue Lambert (65677, sv120@cam.ac.uk) has particular responsibility for computer science.

Joining the Moore Library

The Moore Library admits all students and senior members of the University, and other persons in possession of a valid University Library or Medical Library card.

Outside staffed hours, access to the Library for reference purposes is provided to holders of University Cards that have been validated for 24-hour access.

Registered readers eligible for 24-hour access are:

1. Undergraduate students
2. Postgraduate students
3. Senior members of the University and research staff

Please note that all persons admitted to the Library are required to register as readers. Reader registration and card validation for 24-hour access must be done in person between 0930 and 1630 Monday - Friday.

Arrangement of print collections

Classification

Books and journals in the Library are shelved according to the Library of Congress (LC) classification scheme, an alphanumeric system in which the major subject divisions are allocated a single or double letter code between A and Z. Books are fully classified, while journals are just given a one- or two-letter classmark and then arranged alphabetically within this by title.

Broad computer-science-related areas include:

Computer architecture	QA76.9.A73
Computer graphics	T385
Computer engineering	TK7885-TK7895
Programming & programming languages	QA76.6-QA76.73
Image processing	TA1634 & TA1637

Catalogue searching

To find items within the Moore Library (and simultaneously the University Library and its other dependent libraries), search using [Newton](#).

A wide variety of search options are provided (see [online help](#) for details), but the three basic types described below will enable you to find most things you want.

Journal Title Search

You want to find the journal article given in the reference:

S. L. Smith

[1] *Authenticating users by word association, Comput. and Secur., 6 (1987), 464-470.*

Individual articles within journals are *not* separately catalogued, so you need to look for the journal as a whole and then check whether or not that particular volume is held by the Library.

Use the 'Basic' search option, and select 'within Journal title':

The screenshot shows a search interface with two tabs: 'Basic' and 'Advanced'. The 'Basic' tab is selected. The search box contains the text 'computers and security'. To the right of the search box is a dropdown menu currently set to 'Journal title (omit 'The' & other leading articles)'. Below the search box, there are two more dropdown menus: 'Limit To:' set to 'none' and 'Records per page:' set to '25 records per page'. A 'Search' button is located at the bottom right of the search area. In the top right corner, there is a 'Search History' link.

Type the *beginning* of the journal title into the box, and click on 'Search'.

As in this example, journal titles are often abbreviated in references. If you don't know what an abbreviation stands for, try looking it up in Alkire's *Periodical title abbreviations*, at classmark Ref Z6945.A2 .P47 2001.

You now get a list of all journal titles that match the phrase you typed in:

3 results found

Journal title (omit 'The' & other leading articles)(computers and security)

[Edit / New Search](#)

[Print](#) [Export](#) [E-mail](#) → Select Page All

-  **Computers & security [electronic resource].**
1982
Online
no item information, Electronic resource
-  **Computers and Security.**
QA75
no item information, Betty & Gordon Moore Library: Journals
-  **Computers and Security.**
1984
QA75
no item information, Betty & Gordon Moore Library: Periodicals Collection

As in this example, there are unfortunately often at least two records for each journal due to previous cataloguing practice: check both before you conclude the journal you're looking for is not available.

Click on the title of the second journal to be taken to the record.

Computers and Security.

Title: Computers and Security.
Published: Oxford.
ISSN: 0167-4048

Holdings Information

Location: Betty & Gordon Moore Library: Journals
Classmark: QA75
Number of Items: 0
Status: No information available
Library Has: Vol. 3iv- (1984-)

You can now see that the year you need is in the Library, and that the journal is shelved at classmark QA75.

Note that this title is also available online as an electronic resource, see the first item from your original search:

3 results found

Journal title (omit 'The' & other leading articles)(computers and security)

[Edit / New Search](#)

[Print](#) [Export](#) [E-mail](#) → Select Page All

- [Computers & security \[electronic resource\].](#)
1982
Online
no item information, Electronic resource
- [Computers and Security.](#)
QA75
no item information, Betty & Gordon Moore Library: Journals
- [Computers and Security.](#)
1984
QA75
no item information, Betty & Gordon Moore Library: Periodicals Collection

Again, click on the title of the journal to be taken to the record:

Title: [Computers & security \(Online\)](#)
[Computers & security](#)

Other Title: [Computers and security](#)

Other Entries:
International Federation for Information Processing. Technical Committee 11--Computer Security.
ScienceDirect (Online service)

Published: [Oxford] : Elsevier Science, 1982-
Vol. 1, issue 1 (Jan. 1982)-
Text (electronic journal).
8 nos. a year, 1989-
Three no. a year, 1982-1983
4 no. a year, 1984-1986
Bimonthly, 1987-1988

Description:

Notes:
Title from contents screen (ScienceDirect, viewed Oct. 14, 2005).
Latest issue consulted: Vol. 24, issue 6 (Sept. 2005), viewed Oct. 14, 2005.
Access restricted to authorised University of Cambridge users
The official journal of: Technical Committee 11 (Computer Security) of the International Federation of Information Processing.

Subjects: [Computer security--Periodicals.](#)
[Electronic data processing departments--Security measures--Periodicals](#)

Links:
Full text available from ScienceDirect Business, Management & Accounting Backfile: 1982 to 1994
Full text available from ScienceDirect Computer Science Backfile: 1982 to 1994
Full text available from ScienceDirect Freedom Collection: 1995 to present

The Links lines at the bottom of the screen give details about what is available; in this case full text is available from 1982 to the present, in different backfiles.

Click on the relevant line to be taken directly to the online version of the journal:



Computers & Security

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[Sample Issue Online](#) | [About this Journal](#) | [Submit your Article](#) | [Shortcut link to this Title](#)

[New Article Feed](#)

[Alert me about new Volumes / Issues](#)

[Add to Favorites](#)

[< Previous vol/iss](#) | [Next vol/iss >](#)

Volume 29, Issue 7, Pages 729-812 (October 2010)

= Full-text available
= Abstract only
Articles in Press
Volume 29 (2010)

E-mail articles Export citations PDF downloader Open all previews
1 <input type="checkbox"/> IFC - Editorial Board <i>Page IFC</i>
Show preview PDF (48 K) Related articles Related reference work articles

Author / Title Search for Books

You want to find the book given in the reference:

J. D. Foley

[2] *Computer graphics : principles and practice, Addison-Wesley, 1990.*

Use the 'Advanced' search option.

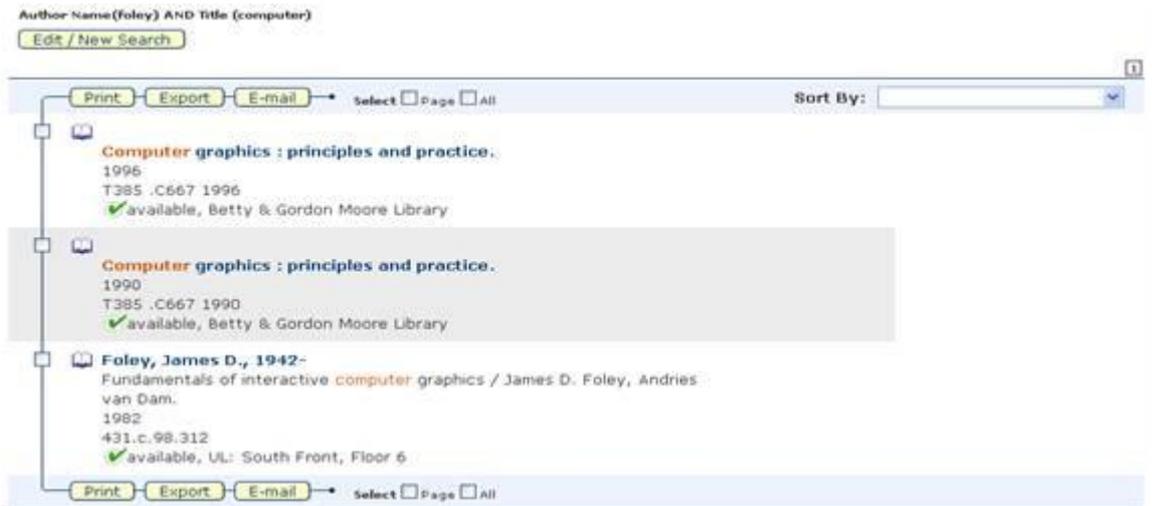
The screenshot shows an advanced search interface with two search criteria. The first criterion is 'foley' within 'Author Name'. The second criterion is 'computer' within 'Title'. Both criteria are connected by 'AND' operators. There are also 'all of these' dropdowns and a 'Search History' link.

Type the author's surname into the first box and choose 'within Author Name'.

Type a distinctive word from the title into the second box and choose 'within Title'.

Click on 'Search' at the bottom of the screen.

You now get a list of all the books which match those two words:



The date for the second book matches your reference, and clicking on this takes you to its record:

Computer graphics :

Title: Computer graphics : principles and practice.
Other Entries: Foley, James D., 1942-
 Foley, James D., 1942- Fundamentals of interactive computer graphics.
Edition: 2nd ed. / James D. Foley ... [et al.].
Published: Reading, Mass. : Wokingham : Addison-Wesley, c1990.
Description: xxiii, 1174 p., [66] p. of plates : ill. (some col.) ; 25 cm.
ISBN: 0201121107
Series: Addison-Wesley systems programming series.
Notes: Previous ed. published as : Fundamentals of interactive computer graphics / by James D. Foley and Andries van Dam, 1982.
 Includes bibliographical references and index.
Subjects: Computer graphics.
 Interactive computer systems.

Holdings Information

Location:	Betty & Gordon Moore Library
Classmark:	T385 .C667 1990
Number of Items:	1
Status:	- Available

Again, the Library holds the book, it is available, and the classmark is T385 .C667 1990.

Books in numbered series

Sometimes you will come across references to books by their series title and number only, or even more confusingly, an article within one of these books. They are not journals, despite the fact that references can make them look very similar, and are best searched for as shown below. [If you are unable to tell whether a reference is to a series or a journal, ask for help or just try both methods of searching.]

You want to find the following work:

[3] *Lecture notes in computer science, vol. 97 (1980)*

Use the 'Advanced' search option.

The screenshot shows a search interface with two tabs: 'Basic' and 'Advanced'. The search query is 'lecture notes in computer science 97'. There are three search criteria listed, each with an 'AND' operator and a 'within' dropdown menu. The first dropdown is set to 'Series', and the second and third are set to 'Keyword (anywhere)'. There is also a 'Year' dropdown set to 'Current Material'.

Alter the top option to be 'within Series', and type keywords from the series title plus the volume number into the search box. Click on 'Search' at the bottom of the screen.

In this example, only one book matches, so you are taken straight to the record:

Reliability evaluation of some fault-tolerant **computer** architectures / Shunji Osaki, Toshihiko Nishio.

Main author: Osaki, Shunji.
Title: Reliability evaluation of some fault-tolerant **computer** architectures / Shunji Osaki, Toshihiko Nishio.
Other Entries: Nishio, Toshihiko, 1954-
Published: Berlin : Springer-Verlag, 1980.
Description: vi, 129 p. : ill. ; 25 cm.
ISBN: 3540102744 (Berlin : pbk.)
 0387102744 (New York : pbk.)
Series: **Lecture notes in computer science ; 97**
Notes: Includes bibliographical references.
Subjects: Fault-tolerant computing.
 Electronic digital **computers**--Reliability.

Holdings Information

Location: Betty & Gordon Moore Library
Classmark: QA76.9.F38 .O83 1980
Number of Items: 1
Status: - Available

Again, this is the book that you want, it is available, and the classmark is: QA76.9.F38 .O83 1980

LibrarySearch



LibrarySearch

[LibrarySearch](#) enables the cross-searching of records for printed books, journals, and electronic material held in all the libraries in the University of Cambridge. Records from the [Newton](#) library catalogues and the [DSpace@cambridge](#) repository are included, and searches can be expanded to include article databases such as JSTOR.

Networked information services

Campus wide information services are co-ordinated and supported centrally by the University Library.

The main [Electronic Resources](#) page on the Library website provides a search/browse option for both electronic journals and online databases, which is useful if you know the title of the resource you want to utilise; and alternatively lists all the resources available in each given subject area, e.g. 'Computer Science'.

Access and passwords

Many networked electronic services are made available within the "cam" domain via IP address recognition, and for these no password is required. Most of the remainder are accessible using a [Raven](#) password.

Raven passwords are [issued](#) to current staff and students of the University by the Computing Service.

Frequently-updated information about access, passwords, and copyright is [available](#) from the University Library.

Retrospective literature searching

Computer-science-specific databases

If you are interested in finding out what books and articles from journals and conference proceedings exist on a particular subject or by a given author (say), the two most important electronic resources available in computer science are:

 **AMERICAN MATHEMATICAL SOCIETY**
MathSciNet [MATHSCINET via WEB](#) - the online version of *Mathematical Reviews* and *Current Mathematical Publications*, published by the American Mathematical Society. Updated daily, the database contains full text reviews from 1940 onwards.

 **zbMATH**
the first resource for mathematics [Zentralblatt MATH](#) - the online version of the print publications *Zentralblatt MATH* and *Jahrbuch über die Fortschritte der Mathematik*, published by the European Mathematical Society. Updated monthly, the database includes reviews dating back to 1868. The database is international in scope and is especially strong in its inclusion of non-English language material.

Both these databases work on IP address recognition.

General databases

Possibly the most valuable of the general databases available to you are:

 **WEB OF KNOWLEDGESM**
in proud partnership with Jisc [Web of Knowledge](#). This platform provides access to a variety of valuable resources, including *Web of Science* and *Inspec*.

Web of Science is the online version of the *ISI Citation Indexes* and *ISI Proceedings*. Updated weekly, the databases contain abstracts and indexes for journal articles and a small selection of monographic series volumes in all subject areas from at least 1970 onwards (from 1899 for science subjects); along with articles in conference proceedings from 1990 onwards. Since each record contains a list of all references cited in the corresponding article, it is possible to search for all articles that cite a known author or work.

Inspec is the online version of *Science Abstracts*. Updated weekly, the database contains abstracts of journal articles and conference papers (as well as significant books, technical reports, and dissertations) from 1969 onwards in the areas of physics, electrical engineering, electronics, computers, control, and information technology.

It is also possible to cross-search all these products. You need a Raven password to make use of this package of resources.

Scopus

[Scopus](#) - is the largest abstract and citation database of research literature (journals, book series, conference proceedings and patent records) and quality web sources across all subject areas. It contains records for selected material dating back to 1823, and is updated daily.

The subject coverage of both these resources is wider, and correspondingly shallower, than the computer-science-specific resources, making them ideal for finding peripheral and interdisciplinary material.

Databases of dissertations and theses

Dissertations and theses are generally indexed separately from other types of literature. The two databases available (which cover all subject areas) are:



[EThOS \(Electronic Theses Online Service\)](#) - a database provided by the [British Library](#) which aims to offer a unified access point for all theses produced by UK Higher Education. Of the theses listed, some will be available in electronic form for immediate free download, while others will only be represented by a summary 'catalogue-style' record. This database is completely free to search, and only requires you to register (which is also free) if you wish to download any of the theses. Once registered, you are also able to request digitisation of any of the theses not yet available for download, but a charge does apply for this service.

ProQuest

[Proquest Dissertations & Theses](#) - a database of references to doctoral and masters dissertations from 1861 onwards. Although the main focus is on the US, dissertations from universities in Europe and the rest of the world are also included. This database works on IP address recognition.

All University of Cambridge theses (for the degrees Doctor of Philosophy, two-year Master of Philosophy, Master of Science and Master of Letters) accepted since 1921 are held in the Manuscripts Reading Room at the University Library. Such theses from 1970 onwards have

records on the [Newton Manuscripts and Theses](#) catalogue. A small but increasing number of Cambridge theses are available for immediate download from [DSpace@Cambridge](#).

Current awareness

It is possible to sign up for services that will send you emails alerting you as new material is published in a given journal or on a particular subject. Many are provided by publishers themselves, but a good place to start would be:



[ZETOC Alert](#). ZETOC itself is another useful general database of references to journal articles and conference papers maintained by the British Library, while by signing up to ZETOC Alert you can be emailed the table of contents from particular journals or receive details of articles which match your predefined search criteria.

Ejournals

The University Library subscribes to a large number of electronic journals. These can be accessed from the [ejournals@cambridge](#) page, which provides title and ISSN searches that return information on which years are included in the subscription and how access to the titles is controlled.

For example:

Showing page 123 of 569 pages. [[<](#) [<<](#) [Previous](#) [Next](#) [>>](#) [>](#)]
Computer architecture news [0163-5964]
ACM Digital Library - **Avail from:** 1972 till present
Access: Available on Campus. Off-campus access available through Raven password or VPDN connection.
[more options ...](#)

Ebooks

The University is also building up a collection of ebooks, which can be accessed from the [ebooks@cambridge](#) page.

The packages of especial interest to computer scientists include those published by [SIAM](#), [Springer](#), [IEEE-Wiley](#) and selected titles from [CUP](#).

Related links

Further information about the [Computer Laboratory Library](#).