

Computer Science A Pathfinder

The Learning Resources Center is a source of information on Computer Science. This pathfinder provides an overview of a variety of sources available to help you thoroughly research your topic. If you need assistance using these resources, please ask a librarian for help.

Books and Audiovisual Materials

The online public access catalog (OPAC) provides a listing of all books and audiovisual materials owned by the BCC Learning Resources Center. You can search the OPAC from stations in the library, or from a remote location, such as a campus computer lab or your home computer via the BCC Library Web site www.sunybroome.edu/~library/. From your [BCC Today](#) home page, look under the “Web Tools” tab. To access BCC Library’s online catalogs select “Catalog” under “Search” on the BCC Library’s homepage. A few of the subjects relating to Computer Science include:

Application software
Computer architecture
Computer graphics
Computer networks
Computer programs
Data transmission systems

Digital communications
Electronic digital computers
Microcomputers
Programming languages (electronic computers)
Software engineering

Reference Collection

The Reference Collection contains dictionaries, encyclopedias and specialized books related to many different subject areas. Most reference books on Computer Science are found in the QA section of the Reference Collection located on the first floor of the Library. These books are for use in the Library only.

The following books are located in the Reference Collection:

Ref
QA
76.15
.C79
2004
Crystal, David. A Glossary of Netspeak and Textspeak. Edinburgh, Scotland: U. Edinburgh Press, 2004.
A glossary of jargon, terminology and expressions that apply specifically to the Internet and electronic media.

Ref
QA
76.15
.D5258
2001
Laplante, Philip A., ed. Dictionary of Computer Science, Engineering and Technology. Boca Raton, FL: CRC Press, 2001.
Defines terms particular to areas of Computer Science, including Algorithms, Artificial Intelligence, Computer Graphics, Database Systems, Operating Systems, Programming Languages, Robotics and Software Engineering.

- Ref
QA
76.2
.A2
L44
1995
- Lee, J.A.N. Computer Pioneers. Los Alamitos, CA: IEEE Computer Soc., 1995.
A collection of biographies that tell the story of the history of computing through the lives of the people who made pioneering contributions to the field. Includes bibliographies when available.
- Ref
QA
76
.P367
204
- Patt, Yale N. Introduction to Computing Systems: From Bits & Gates to C & Beyond. 2nd ed. New York: McGraw-Hill, 2004.
This books takes a “bottom-up” approach to the basics of computing, covering both hardware and programming languages. It addresses MOS transistors, logic gates, logic structures, memory, machine language programming and data structures.
- Ref
TK
5105.59
.P56
2002
- Phoha, Vir V. Internet Security Dictionary. New York: Springer-Verlag, 2002.
This dictionary provides reliable definitions and descriptions, with numerous illustrations, for all major aspects of Internet security technology, including Internet commerce, encryption, biometrics and firewalls.
- Ref
QA
76.15
E48
2000
- Ralston, Anthony, Edwin D. Reilly and David Hemmendinger, eds. Encyclopedia of Computer Science. 4th ed. London: Nature Publishing Group, 2000.
A general reference for a broad picture of computer science and engineering, its history and direction. Contains short definitions and longer articles, bibliographies and websites for further research, illustrations and examples.

Book Collection

Many general books on Computer Science are located in the QA section of the Circulating Collection located on the second floor of the library, but other subject areas in the T and TK sections are also relevant. You may want to browse these books to become more familiar with your topic.

Here are some call number areas you may find useful:

- QA 76.75 Software engineering
- QA 76.9 Computer architecture
- N 7433 Computer art
- T 385 Computer graphics
- TK 7887.5 Computer interfaces
- TK 5105.5 Computer networks

These books may be checked out of the library.

E-Book Collection

Reference books and handbooks on Computer Science are available from our NetLibrary Collection, an online book service. To access BCC Library's eBook catalog select "Electronic Books" under "Search" on the [BCC Library's homepage](#). You can search for books by title or keyword, or even search the contents of the eBooks for specific information. Since you can access NetLibrary from any internet-abled computer, this is an excellent resource for finding reference materials whenever you need them. Once you have selected an eBook to read, click on the "Browse this eBook online" link to open the book. Here are some eBooks you may find useful:

- Albin, Stephen T. The Art of Software Architecture: Design Methods and Techniques. Indianapolis, IN: Wiley, 2003.
- Barr, Michael. Programming Embedded Systems in C and C++. Sebastopol, CA: O'Reilly, 1999.
- Brink, Tom. Designing Web Sites That Work. San Francisco: Elsevier, 2002.
- Eidahl, Loren. Using Visual Basic 6. Indianapolis, IN: Que, 1999.
- Flynn, Roger R. Computer Sciences. New York: Macmillan, 2002.
- Hutcheson, Marnie L. Software Testing Fundamentals: Methods and Metrics. Indianapolis, IN: Wiley, 2003.
- Koers, Diane. Windows XP Fast & Easy. Indianapolis, IN: Premier Press, 2002.
- Niederst, Jennifer. Web Design in a Nutshell: A Desktop Quick Reference. Sebastopol, CA: O'Reilly, 1999.
- Stojmenović, Ivan. Handbook of Wireless Networks and Mobile Computing. New York: Wiley, 2002.

Databases and Periodicals

The library subscribes to many databases with periodical literature, much of it in full text format. To access the databases, select "Articles" under "Search" on the [BCC Library's homepage](#), then select from a listing of the BCC Library's online databases. Here are some full text database sources related to your subject area:

- **EBSCO** – *Academic Search Elite* provides full text access to the following related journals:

Byte
Computerworld
Dr. Dobb's Journal
Information Week
InfoWorld
Network Computing
PC Magazine
PC World

- **InfoTrac OneFile** - This database contains the following full text journals related to Computer Science:

AI Magazine
 Design News
 Embedded Systems
 Internet Business News
 Microprocessor Report
 Network World
 Software Development
 Software World

- **ScienceDirect** – This database contains full text articles from over 700 science, technology, and medical journals. Some of the technology journals related to Computer Science include:

Computer Languages
 Computer Networks
 Computers & Graphics
 Information Systems
 Journal of Systems and Software
 Network Security
 Technology in Society

All of these electronic resources are available remotely

To access services off campus, simply go to the BCC homepage, www.sunybroome.edu/ and look for the link into the Library under “About BCC”. Or, go directly to the BCC Library homepage www.sunybroome.edu/~library/. Once at the [BCC Library’s homepage](#), click “Articles” under “Search” and select the database of your choice. A dialog box will appear requesting the following

Username = First part of your BCC email address
Last name, first initial and possibly a number. (ex. goldmanf3)
 Password = [xxxxxx]
Use your password for the BCC Intranet (ex. BCC Today).

Periodicals in Print

A complete listing of the magazines and journals received in print is available in the reference area. Journals related to Computer Science include:

Computer Graphics World
 Dynamic Graphics
 IEEE Spectrum
 InfoWorld
 PC Computing
 PC World

Ziff Davis Smart Business
Wired

Professional Associations

Organizations of experts, policy makers, and researchers.

American Association for Artificial Intelligence

www.aaai.org

Association for Computing Machinery

www.acm.org

Association for Women in Computing

www.awc-hq.org

IEEE Computer Society

www.computer.org

International Webmasters' Association

www.iwanet.org

Internet Society

www.isoc.org

Network and Systems Professionals Association

www.naspa.com

Open Source Initiative (OSI)

www.opensource.org

The Unicode Consortium

www.unicode.org

The World Wide Web Consortium (W3C)

www.w3.org

Selected Internet Sites

AI Topics www.aaai.org/AITopics/index.html

A dynamic library of introductory information about artificial intelligence. The graphics and some content are designed for K-12 schools, but this site is full of information on the science of AI, machine learning and robotics. Links to academic programs, conferences and events, and career guides.

BCC Computer Studies Department http://web.sunybroome.edu/~cst_dept/index.htm

Start here for information about BCC's computer science program, faculty and links to area industry.

Cobol Report <http://cobolreport.com>

A site devoted to COBOL from both hardware manufacturers and software developers. Articles are practical, historical and philosophical. Offers books reviews, tutorials, white papers and developments in the COBOL programming world.

Edinburgh Engineering Virtual Library www.eevl.ac.uk

Based in the U.K., this site gives quick and reliable access to engineering, mathematics, and computing information, including e-journals, databases, training materials, professional societies, university and college departments, research projects, bibliographic databases, software, information services and recruitment agencies.

First Monday www.firstmonday.org

A free, international, peer-reviewed journal devoted to the Internet. Discusses all aspects of the Internet, including security issues, commerce, demographics, search engines, and culture.

MIT OpenCourseWare – Electrical Engineering and Computer-Science

<http://ocw.mit.edu/OcwWeb/Electrical-Engineering-and-Computer-Science/index.htm>

MIT's goal is to make all its course lectures and materials available on line, free to anyone. Link into any Computer Science course, and check out the tools and resources available.

Programmer's Heaven www.programmersheaven.com

An online reference for programmers, featuring more than 9,000 file downloads and over 2,500 links to programming web sites.

The Turing Archive for the History of Computing www.alanturing.net

A collection of digital facsimiles of original documents by Turing and other pioneers of computing. Easy to navigate, with photo archives and material on early computing activities in artificial intelligence and code-breaking, especially in Britain, and links to more web sites for further study.

University of Albany (Georgia) Libraries Computer Science Web Site

<http://library.albany.edu/subject/csci.htm>

Contains links to online resources, including algorithms, biographies, calculators, dictionaries, compilers, language tools, software and more.

Webdeveloper.Com www.webdeveloper.com

Forums on programming, scripts to share, industry news, tutorials. "Where web developers and designers learn how to build web sites."

Webmonkey <http://hotwired.lycos.com/webmonkey>

A resource for web developers. Links to quick reference sites and 'How-To' libraries for everything a developer desires, including authoring, multimedia, e-commerce, programming, and jobs. Categories for "Beginners", "Builders" and "Masters" make it easy to find resources at the level you need.