

Assessment of Library Collections

Florida International University

Computer Science

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Conference Proceedings

FIU has access to the following online series that include conference proceedings: Association for Computing Machinery Digital Library; IEEE/IET Electronic Library; and Springer *Lecture Notes in Computer Science*, including the subseries *Lecture Notes in Artificial Intelligence* and *Lecture Notes in Bioinformatics*.

Journals

Library subscriptions by general count

FIU has 749 online journals in computer science and an additional 60 in information technology, 255 in telecommunications, and 2,722 in various Engineering fields (as itemized in [Table 1](#) at the bottom of this report). Every computer science journal subscription once for the print format has been shifted to online access (but for six for which online is not offered by the publisher).

The online journal packages of main importance to computer science include Academic Press, the Association for Computing Machinery, Blackwell-Synergy, Cambridge STM, Elsevier Science Direct, IEEE/IET Electronic Library, Springer-Kluwer, and Wiley Interscience.

Citation-ranked literatures

FIU's holdings in the seven citation-ranked literatures of Computer Science are outlined [Table 2](#).

	Total # of Titles	# Held by FIU	% Held	Spreads of Holdings of Top-Ranked Titles
Artificial Intelligence	72	50	69%	41 of the top 45
Cybernetics	18	10	56%	6 of the top 9
Hardware & Architecture	45	35	78%	28 of the top 33
Information Systems	77	61	79%	All of the top 14
Interdisciplinary Applications	75	58	77%	16 of the top 21
Software Engineering	75	59	79%	34 of the top 37
Theory & Methods	71	53	75%	39 of the top 46
TOTALS	433	326	75%	

Collection development progress

At the last program review, in 2003, the library had 61% of the citation-ranked journals (264 of the 433 titles). The library has added 62 since then, increasing the overall proportion of holdings to 75% (326 titles).

Main Databases

- Applied Science and Technology
- Computer Abstracts
- Computer and Information Systems Abstracts
- Computer Database
- High Technology Research Database with Aerospace.

Specialized Databases

- Applied Science and Technology
- Computer Abstracts
- Computer and Information Systems Abstracts
- Computer Database
- High Technology Research Database with Aerospace
- Electronics and Communications Abstracts
- Engineering Index (Compendex)
- History of Science, Technology, and Medicine
- INSPEC
- Mechanical and Transportation Abstracts
- MathSciNet
- Science Citation Index.

Online Series

- CRC Handbook of Chemistry & Physics
- CRC EngNetBase.

Books

The library's book approval plan for the sciences generally covers all university press titles and all trade-publisher titles on contemporary social or public policy aspects of science, engineering, and technology.

The monograph literature for Computer Science (QA75-76) is not voluminous: approval-plan coverage in FY08 was four university-press titles and nine trade-publisher guidebooks. FIU will expand its coverage of guidebooks and handbooks significantly this year with a ProQuest Safari e-book collection of such texts—in collaboration with the university's technology division; this will enable the faculty to make their own selections on a semi-annual basis.

Of the collection of 59,984 NetLibrary e-books, 15,578 are in the computer science field. Both campus libraries have expansive budgets for faculty orders of library materials.

Faculty-Library Relations

The College of Engineering and Computing has a Library Committee with 13 members: eight faculty, two associate library directors, the engineering librarian, and the head of access services. It meets at least once a semester, more often when college-wide oversight would be useful for certain projects. For example, the Committee met often in 2008 for a journal review of the PhD program in Material Science and to compile supporting documents for the library's acquisition of the IEEE Digital Library.

Geographic Information Systems (<http://gislab.fiu.edu/>)

The Geographic Information Systems Center provides GIS and remote-sensing software, such as ArcGIS desk top, ArcSDE, ArcGIS Server and ERDAS Imagine. Its Maps and Imagery User Services area houses print cartographic materials and provides access to geo-spatial datasets and other digital cartographic materials.

GIS resources of particular relevance to Computer Science include about 1,600 Florida spatial data sets searchable via FTP; about 3,000 Latin American and Caribbean spatial data sets; about 600 East Africa spatial datasets; detailed shore line data of the United States; LandsAT Imagery; complete ESRI maps and data; comprehensive Florida state and county data sets; historical hurricane tracts data; and USGS DLG, DRG, and DEM.

This Center has worked closely with Dr. Rische and his group at the High Performance Database Center and with Dr. Evangelos Christidis on a number of grant proposals. Of particular interest is the “Ontology-Assisted Information Management, Geo-Visualization and Retrieval Tool for Discipline Specific Knowledge Exploration” proposal submitted to the Institute for Museum and Library Services in 2007.

Table 1: Subject headings of online journals in Engineering and Applied Sciences

- Applied Mathematics (58)
- Applied Physics (88)
- Chemical & Materials Engineering
 - Chemical Engineering (289)
 - Materials Science (129)
- Civil & Environmental Engineering
 - Civil Engineering (259)
 - Environmental Engineering (88)
 - Ocean Engineering (4)
 - Operations Research (58)
 - Transportation Engineering (68)
- Computer Science (749)
- Electrical & Computer Engineering
 - Electrical Engineering (691)
 - Information Technology (61)
 - Telecommunications (257)
- Engineering - General (167)
- Mechanical Engineering
 - Aeronautics Engineering & Astronautics (101)

- Automotive Engineering (60)
- Bioengineering (80)
- Hydraulic Engineering (15)
- Industrial & Management Engineering (277)
- Mechanical Engineering - General (193)
- Metallurgy & Mineralogy (120)
- Mining Engineering (62)
- Nuclear Engineering (34)
- Technology - General (208)