Collection Subject Statement: Computing & Information

Last Reviewed: March 2025

The Computing & Information collections at the University of Pittsburgh Library System support the academic programs and research needs of students, faculty, and staff in schools, departments, and programs of Computer and Information Science across the University, as well as related fields including Physics, Forensic Science, Criminal Justice, Biology, Chemistry, and Engineering. Relevant collections for this subject can be found at multiple University Library System (ULS) locations including Hillman Library, Hanley Library, Millstein Library, Owen Library, and the Science & Engineering Library.

Purpose/Audiences

The Computing & Information collections serve the teaching, learning, and research needs of the faculty and students at the School of Computing and Information on the Pittsburgh campus, as well as faculty and students across all five campuses of the University who engage with research and study in this field. Active areas of research and teaching include computational biology, computer science, computational modeling, cybersecurity, data science, digital narrative and interactive design, information science, physics and quantum computing, computational social science, intelligent systems and artificial intelligence, library and information science, network security, and telecommunications. The overall goal of the collections is to provide a wide range of scholarly resources regarding computer science, information science, and data science to support the teaching, learning, and research needs of the University.

Due to the interdisciplinary nature of research and study in this field, other collections within the University Library System of interest to computer science are the engineering collection and mathematics collection. It is assumed that general works on computer hardware design, robotics, and engineering aspects will be collected for engineering and that purely mathematical works will go into the mathematics collection. Applications of computer science to specific disciplines are acquired if they are a major focus of research in the department, such as computational linguistics. The Computing & Information collections focus on broader methods, however, and specific applications to areas such as business, chemistry, and medicine are generally more appropriate for those subject collections and are acquired only selectively.

Guiding Principles and Areas of Focus

The collections include books, selected book series, conference proceedings, journals, reference materials, and databases relating to computer and information science and their applications. The focus is on original writings and research in all formats, but occasional reprints of classic works or collected works of major contributors to the field may be included. Advanced and graduate level textbooks may be acquired, but most undergraduate and introductory textbooks will only be acquired on request in support of

course reserves. Access to user guides and software manuals is maintained for those that are applicable to a broad audience. Major indexing and abstracting databases covering computing and information science literature are available for all members of the University community. In alignment with the University's commitment to open access, Open Educational Resources (OERs) relevant to coursework and research needs are also supported.

Scope

English is the primary language of the collections. No effort is made to collect in other languages, although occasionally bi- or multi-lingual material that is primarily in English may be added. Materials are acquired primarily from publishers based in North America and Europe, but individual works and journals reflect a broad international scope of authors and contributors. Chronologically, the emphasis is on current materials, although replacements for noted works and works in less time-sensitive areas such as theory and algorithms may be acquired from earlier dates.

Library of Congress Classification

- **H61.3 - H62: Computational social sciences, social network analysis**
- **QA71-90:** Mathematics – Instruments and machines
- **QA75.5-76.95:** Electronic Computers. Computer
- **QA76.3 - QA76.9:** Computer Programming, Software, and Data Processing
- **QA77 - QA76.95:** Hardware, Equipment, and Computer Architecture
- **QA79.8:** Artificial Intelligence, Robotics, and Computer Vision
- **QA267.5.M4**: **Mathematical foundations of machine learning**
- **QA268 - QA299.3**: **Mathematical aspects of computing**
- **TK5101-6720:** Electrical Engineering – Telecommunication
- **Z103 - Z118:** Library Science and Techniques
- **Z668 - Z669.9**: **Information science, metadata, information retrieval**
- **Z675:** Technical Aspects of Information Management
- **Z678:** Library Management, Organization, and Administration
- **Z678.9**: **Digital libraries, digital preservation**

Connections & Collaborations

The ULS collaborates with other institutions and consortia to acquire specialized materials that support research, teaching, and learning in the subjects of Computing & Information, particularly in areas where shared resources improve accessibility to rare or costly materials. Regionally and nationally, the ULS participates in several consortia for collection development (EAST, Hathi Trust, CRL) and resource sharing (PALCI EZBorrow, OCLC Interlibrary Loan, RapidILL) that shape strategy for the Computing & Information collections. Within the University, the intersection of Computing & Information with other departments and disciplines such as bioinformatics, computer engineering, and scientific computing informs the development and scope of the collections.

Subject Experts

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Sources of Information

https://www.sci.pitt.edu/
https://www.greensburg.pitt.edu/academics/majors-minors-certificates