

Computer science library provision

Within the university, the largest collections of computer science resources are in the Computer Laboratory and the Betty & Gordon Moore library (BGML). The BGML presently selects stock from the UL's legal deposit intake, and supplements this with other resources which are purchased by its own staff. Some older material is still retained at the UL, as well as 'less academic', newly received titles in computing. Despite this, however, the UL normally leaves responsibility for computer science to other libraries.

The Computer Laboratory library remains as independent as it is possible for any departmental library to be, although we do contribute to the Journals Coordination Scheme, and our holdings are catalogued on Newton. Similarly, the present ethos within the department as a whole is to perform as many functions locally as possible. The Computer Laboratory allows all members of the department (including undergraduates) to borrow, and other members of the university may use the library for reference purposes.

Services for undergraduates

The complete list of recommended books for undergraduate students is substantial, and the most recent combined list is available online at <http://www.cl.cam.ac.uk/library/booklist.pdf>. In addition, the changes to the list for each year will be circulated to college librarians using the booklists mailing list, or whatever mechanism may succeed it. The Computer Laboratory is the only library holding a complete set of the undergraduate books, and, not surprisingly, these are in heavy demand.

It is unlikely that the CL library alone can meet the demand for these books, and this is the principal area in where college libraries can make a major contribution to the provision for computer scientists. Although increasing pressures on library budgets would make it impossible to satisfy all student requests, undergraduates frequently express a wish that their college library stock more computer science texts. The list of

recommended books indicates which are the most important, and I am happy to offer further advice. Regrettably, lists of frequently borrowed books do not give a reliable indication of usage in this library due to items being stolen or retained for long periods.

Very little is known for sure about e-book usage, although I have not seen any evidence of their use within the library, while the availability of core texts as e-books is still surprisingly poor. Anecdotal evidence from conversations with students suggests that printed books are still preferred, for ease of reading, and for convenience.

Services for postgraduates

As expected, postgraduate students tend to have more specialised needs which are best served by a single subject departmental library. Typically papers in journals and conference proceedings are more important than monographs, although not exclusively. The monographic series Lecture Notes in Computer Science (LNCS), and the IEEE Electronic Library (IEL) have both proved to be exceptionally popular and important resources. Both of these resources are available online across the whole university, and are financially supported by the Computer Laboratory.

Although all postgraduate students are expected to undertake much 'independent' reading, they may still be using some of the same books as undergraduates, especially in the earlier stages of their course. Similarly, the new M.Phil course in Advanced Computer Science does make recommendations for reading, although a complete list is not available. The syllabus pages at <http://www.cl.cam.ac.uk/teaching/current/acs.html> offer some information, and there is overlap with the undergraduate reading list.

To cater for the occasional requirement for literature which is not available within Cambridge this library and the BGML both offer an inter-library loans service. The requirement for this has fallen since LNCS and the IEL became available. It is, of course, possible that students may obtain items using document supply services through other libraries too.

Services for academic staff

Almost all services to staff are delivered by subject specific libraries, here, or possibly in the BGML. Current evidence seems to suggest that they prefer to access papers in journals and conference proceedings online from their own office. Furthermore, any monographs they require are often purchased on their research grants, so that ultimately they have little need to make physical visits to the library. Enquiries are often made by e-mail and the evidence would suggest that staff are reluctant to make a journey to the UL or BGML without very good reason. In some cases it has been necessary for me to visit the UL on their behalf to photocopy material not available locally.

General computing resources

The previous sections have concentrated on information provision for academic computer science, although there exists a need for more general computing information. Computers are now used in virtually every subject for tasks from complex numerical modelling, through data analysis, to typesetting an academic paper. This library principally serves members of the department, and we do not have sufficient resources to help, for example, physicists writing numerical models in Fortran, or geographers needing to analyse fieldwork data.

Unfortunately many libraries in other subjects seem reluctant to hold computing books. There is, therefore, a demand for general books on programming languages, statistical methods, and occasionally even specific software packages. The library at the Institute of Astronomy has such a collection aimed at users of computers which has proved very popular. Again, I would be happy to offer advice to any library seeking to establish such a collection.

Electronic resources

Although it is expected that most computer science related enquiries will be directed to one of the specialist libraries, either the Computer Laboratory or the BGML, knowledge of some important electronic resources in the field may still be useful.

For tracing papers and other publications, the most useful resources are the Trier Bibliography (DBLP) and the ACM Guide to Computing Literature. Both of these offer the most comprehensive coverage of papers published in computing journals and major conference proceedings. DBLP is available at <http://dblp.uni-trier.de/db/> and may easily be searched by author name. Further links to external sites offer the possibility to perform more complicated searches of the same database, while there are also bibliographical listings by journal, conference and subject. The ACM guide to computing literature is at <http://dl.acm.org> and probably has more comprehensive coverage, although it is less easy to search accurately. By default only the ACM publications (to which full text access is available across the university) are searched, but an option exists to expand a search to include the Guide.

Given their popularity, it may also be worth familiarising yourself with the interfaces to LNCS: <http://link.springer.com/bookseries/558>, and the IEEE Electronic library: <http://ieeexplore.ieee.org>.

Links to all of these and other resources are available from the Computer Laboratory library's webpages.

Physical library environment

It is departmental policy to maintain the library as a quiet space, and therefore most desks are kept free of computers, although part of the library is now equipped as a writing up area for Ph.D. students. Readers are encouraged to keep noise to a minimum, although collaborative work is allowed within reason. This means that the library is an increasingly popular place for undergraduate students to work, especially during exam time. Students using the library also appreciate having most essential textbooks close at hand and, interestingly, many choose to work in the library rather than to borrow books and work in their own room. This suggests that there is still a general requirement for study spaces within libraries. 24 hour access to the library is also very popular, although the resources are not available to safely offer this to all students.