

Sorts of references

K. V. Roberts

PAPERBASE: A Computerized Personal Database for Scientists.

By Anthony Durham.

Wight Scientific, 44 Roan St, London SE10 9JT. Booklet, pp.31, £25, \$50 (airmail postage included) for institutional use; £10, \$20 for personal use. Diskettes available for various computers, £50, \$100 (booklet included).

PAPERBASE is a BASIC package for constructing and interrogating a database of references. It normally uses a micro-computer with diskette drives, screen, keyboard, printer, BASIC interpreter and word-processing program, although it can run on larger or smaller systems. I tested it on an IBM PC-XT and found the increase of speed provided by a Winchester disk and the BASIC compiler to be an advantage, although it is still a very useful system without these facilities.

References and keywords are input using program STORE: it is important to get the format correct, but this is not difficult and one can edit the ASCII output file later (for example to add new keywords). ORDER sorts alphabetically by first authors and an on-line search on logical combinations of expressions is carried out by SEARCH, producing a file containing those references that meet the given criteria. References are converted to the format required by a particular journal by LAYOUT, using word-processing facilities such as bold-face and underlining where appropriate. The user may need to develop his own format code since journal practice differs so widely, but examples are given and it should not take long to master the rules. Finally, HUNTER scans through an ASCII file — for example a typescript produced on a word-processor — to report the references that it finds.

The BASIC program may have to be modified before use, depending on the computer. For the IBM PC no changes were necessary and PAPERBASE ran straightaway. However, the code is well documented in the booklet, and advice is given on how to make changes should these be needed. Users may also wish to extend the programs to meet additional requirements or to build them into larger systems; I found it helpful to modify SEARCH so that it did not distinguish between upper and lower case, and this was readily done with a few BASIC statements although it somewhat slowed down the search.

Altogether PAPERBASE is a well-engineered piece of software. It should find wide use throughout the scientific community. □

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