REDUCING THE RETRIEVAL TIME OF SCATTER STORAGE TECHNIQUES

RICHARD P. BRENT

ABSTRACT

A new method for entering and retrieving information in a hash table is described. The method is intended to be efficient if most entries are looked up several times. The expected number of probes to look up an entry, predicted theoretically and verified by Monte Carlo experiments, is considerably less than for other comparable methods if the table is nearly full. An example of a possible Fortran implementation is given.

COMMENTS

Only the Abstract is given here. The full paper appeared as [1].

REFERENCES

[1] R. P. Brent, Reducing the retrieval time of scatter storage techniques, *Communications of the ACM* 16 (1973), 105–109. Zbl 251.68019. Also appeared as *A modified linear scatter storage technique*, Report TR RC 3460, IBM Research, Yorktown Heights, New York (July 1971), 20 pp. See also "Comment on Brent's scatter storage algorithm", *Communications of the ACM* 16 (1973), 703.

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