

BIBLIOGRAPHY

- AITCHISON, T. M., HALL, A. M., LAVELLE, K. H. and TRACY, J. M., *Comparative Evaluation of Index Languages*, Part I, *Design*, Part II, *Results*, Project INSPEC, Institution of Electrical Engineers, London (1970)
- ANDERBERG, M. R., *Cluster Analysis for Applications*, Academic Press, London and New York (1973)
- ANDREWS, K., 'The development of a fast conflation algorithm for English'. Dissertation submitted for the Diploma in Computer Science, University of Cambridge (unpublished) (1971)
- AUGUSTSON, J. G. and MINKER, J., 'An analysis of some graph-theoretic cluster techniques', *Journal of the ACM*, 17, 571-588 (1970)
- BAKER, F. B., 'Information retrieval based upon latent class analysis', *Journal of the ACM*, 9, 512-521 (1962)
- BALL, G. H., 'Data-analysis in the social sciences: What about the details?', *Proceedings of the Fall Joint Computer Conference*, 27, 533-559 (1966)
- BARBER, A. S., BARRACLOUGH, E. D. and GRAY, W. A., 'On-line information retrieval as a scientist's tool', *Information Storage and Retrieval*, 9, 429-440 (1973)
- BAR-HILLEL, Y., *Language and Information. Selected Essays on their Theory and Application*, Addison-Wesley, Reading, Massachusetts (1964)
- BARRACLOUGH, E. D., MEDLARS on-line search formulation and indexing, Technical Report Series, No. 34, Computing Laboratory, University of Newcastle upon Tyne.
- BECKNER, M., *The Biological Way of Thought*, Columbia University Press, New York, 22 (1959)
- BELL, C. J., ALDRED, B. K. and ROGERS, T. W., 'Adaptability to change in large data base information retrieval systems'. Report No. UKSC-0027, UK Scientific Centre, IBM United Kingdom Limited, Neville Road, Peterlee, County Durham, U.K. (1972)
- BELL, J. R. and KAMAN, C. H., 'The linear quotient hash code', *Communications of the ACM*, 13, 675-677 (1970)
- BELNAP, N. P., 'An analysis of questions: Preliminary report', Scientific Report TM-1287, SDC, Santa Monica, California (1963)
- BERGE, C., *The Theory of Graphs and its Applications*, Methuen, London (1966)
- BERTZISSL, A. T., *Data Structures: Theory and Practice*, Academic Press, London and New York (1971)

BIBLIOGRAPHY

- BONNER, R. E., 'On some clustering techniques', *IBM Journal of Research and Development*, 8, 22-32 (1964)
- BONO, P. R., 'Adaptive procedures for automatic document retrieval', Ph.D. Thesis, University of Michigan (1972)
- BORKO, H. and BERNICK, M., 'Automatic document classification', *Journal of the ACM*, 10, 151-162 (1963)
- BORKO, H., *Automated Language Processing*, Wiley, New York (1967)
- BOULTON, D. M. and WALLACE, C. S., 'A program for numerical classification', *The Computer Journal*, 13, 63-69 (1970)
- BROOKES, B. C., 'The measure of information retrieval effectiveness proposed by Swets', *Journal of Documentation*, 24, 41-54 (1968)
- BURKHARD, W. A. and KELLER, R. M., 'Some approaches to best-match file searching', *Communications of the ACM*, 16, 230-236 (1973)
- CARROLL, J. M. and DEBRUYN, J. G., 'On the importance of root-stem truncation in word-frequency analysis', *Journal of the American Society for Information Science*, 21, 368-369 (1970)
- CHAN, F. K., 'Document classification through use of fuzzy relations and determination of significant features', M.Sc. Thesis, Department of Computer Science, University of Alberta, Canada (1973)
- CHANG, C. L. and LEE, R. C. T., *Symbolic Logic and Mechanical Theorem Proving*, Academic Press, New York (1973)
- CHOU, C. K., 'Algorithms for hash coding and document classification', Ph.D. Thesis, University of Illinois (1972)
- CLEVERDON, C. W., 'Progress in documentation. Evaluation of information retrieval systems', *Journal of Documentation*, 26, 55-67 (1970)
- CLEVERDON, C. W. 'On the inverse relationship of recall and precision', *Journal of Documentation*, 28, 195-201 (1972)
- CLEVERDON, C. W., MILLS, J. and KEEN, M., *Factors Determining the Performance of Indexing Systems*, Vol. I, *Design*, Vol. II, *Test Results*, ASLIB Cranfield Project, Cranfield (1966)
- COATES, E. J., 'Some properties of relationships in the structure of indexing languages', *Journal of Documentation*, 29, 390-404 (1973)
- CODD, E. F., 'A relational model of data for large shared data banks', *Communications of the ACM*, 13, 377-387 (1970)
- COLE, A. J., *Numerical Taxonomy*, Academic Press, New York (1969)
- Comparative Systems Laboratory, *An Inquiry into Testing of Information Retrieval Systems*, 3 Vols, Case-Western Reserve University (1968)
- CONOVER, W. J., *Practical Nonparametric Statistics*, Wiley, New York (1971)
- COOPER, M. D., 'A cost model for evaluating information retrieval systems', *Journal of the American Society for Information Science*, 23, 306-312 (1972)
- COOPER, W. S., 'Expected search length: A single measure of retrieval effectiveness based on weak ordering action of retrieval systems', *Journal of the American Society for Information Science*, 19, 30-41 (1968)
- COOPER, W. S., 'A definition of relevance for information retrieval', *Information Storage and Retrieval*, 7, 19-37 (1971)
- COOPER, W. S., 'On selecting a measure of retrieval effectiveness', Part 1: 'The "subjective" philosophy of evaluation', Part 2: 'Implementation of the philosophy', *Journal of the American Society for Information Science*, 24, 87-100 and 413-424 (1973)
- CORMACK, R. M., 'A review of classification', *Journal of the Royal Statistical Society, Series A*, 134, 321-353 (1971)
- CROFT, W. B., 'Document clustering', M.Sc. Thesis, Department of Computer Science, Monash University, Australia (1975)

BIBLIOGRAPHY

- CROUCH, D., 'A clustering algorithm for large and dynamic document collections', Ph.D. Thesis, Southern Methodist University (1972)
- CUADRA, A. C. and KATTER, R. V., 'Opening the black box of "relevance"', *Journal of Documentation*, 23, 291-303 (1967)
- DATTOLA, R. T., 'A fast algorithm for automatic classification', In Report ISR-14 to the National Science Foundation, Section V, Cornell University, Department of Computer Science (1968)
- DISISS, Design of information systems in the social sciences. Clustering of journal titles according to citation data: preparatory work, design; data collection and preliminary analysis. Bath, Bath University Library, Working Paper No. 11 (1973)
- DODD, G. G., 'Elements of data management systems', *Computing Surveys*, 1, 117-133 (1969)
- DOROFEYUK, A. A., 'Automatic Classification Algorithms (Review)', *Automation and Remote Control*, 32, 1928-1958 (1971)
- DOYLE, L. B., 'The microstatistics of text', *Information Storage and Retrieval*, 1, 189-214 (1963)
- DOYLE, L. B., 'Is automatic classification a reasonable application of statistical analysis of text?', *Journal of the ACM*, 12, 473-489 (1965)
- DUDA, R. O. and HART, P. E., *Pattern Classification and Scene Analysis*, Wiley, New York (1973)
- EDMUNDSON, H. P. and WYLLYS, R. E., 'Automatic abstracting and indexing survey and recommendations', *Communications of the ACM*, 4, 226-234 (1961)
- EIN-DOR, P., 'The comparative efficiency of two dictionary structures for document retrieval', *Infor Journal*, 12, 87-108 (1974)
- ELLIS, B., *Basic Concepts of Measurement*, Cambridge University Press, London (1966)
- ETZWEILER, L. and MARTIN, C., 'Binary cluster division and its application to a modified single pass clustering algorithm', In Report No. ISR-21 to the National Library of Medicine (1972)
- FAIRTHORNE, R. A., 'The mathematics of classification'. *Towards Information Retrieval*, Butterworths, London, 1-10 (1961)
- FARRADANE, J., RUSSELL, J. M. and YATES-MERCER, A., 'Problems in information retrieval. Logical jumps in the expression of information', *Information Storage and Retrieval*, 9, 65-77 (1973)
- FISHER, L. and VAN NESS, J. W., 'Admissible clustering procedures', *Biometrika*, 58, 91-104 (1971)
- FOSTER, J. M., *List Processing*, Macdonald, London; and American Elsevier Inc., New York (1967)
- FRITZCHE, M., 'Automatic clustering techniques in information retrieval', Diplomarbeit, Institut für Informatik der Universität Stuttgart (1973)
- GARVIN, P. L., *Natural Language and the Computer*, McGraw-Hill, New York (1963)
- GOFFMAN, W., 'On relevance as a measure', *Information Storage and Retrieval*, 2, 201-203 (1964)
- GOFFMAN, W., 'An indirect method of information retrieval', *Information Storage and Retrieval*, 4, 361-373 (1969)
- GOFFMAN, W. and NEWILL, V. A., 'A methodology for test and evaluation of information retrieval systems', *Information Storage and Retrieval*, 3, 19-25 (1966)
- GOOD, I. J., 'Speculations concerning information retrieval', Research Report PC-78, IBM Research Centre, Yorktown Heights, New York (1958)
- GOOD, I. J., 'Categorization of classification', In *Mathematics and Computer Science in Biology and Medicine*, HMSO, London, 115-125 (1965)

BIBLIOGRAPHY

- GOOD, I. J., 'The decision-theory approach to the evaluation of information retrieval systems', *Information Storage and Retrieval*, 3, 31-34 (1967)
- GOODMAN, L. and KRUSKAL, W., 'Measures of association for cross-classifications', *Journal of the American Statistical Association*, 49, 732-764 (1954)
- GOODMAN, L. and KRUSKAL, W., 'Measures of association for cross-classification II: Further discussions and references', *Journal of the American Statistical Association*, 54, 123-163 (1959)
- GRAY, J. C., 'Compound data structure for computer aided design: a survey', *Proceedings ACM National Meeting*, 355-365 (1967)
- HARARY, F., NORMAN, R. Z. and CARTWRIGHT, D., *Structural Models: An Introduction to the Theory of Directed Graphs*, Wiley, New York (1966)
- HATFIELD, D. J. and GERALD, J., 'Program restructuring for virtual memory', *IBM Systems Journal*, 10, 168-192 (1971)
- HAYES, R. M., 'Mathematical models in information retrieval', *In Natural Language and the Computer* (Edited by P. L. Garvin), McGraw-Hill, New York, 287 (1963)
- HEINE, M. H., 'The inverse relationship of precision and recall in terms of the Swets' model', *Journal of Documentation*, 29, 81-84 (1973)
- HEINE, M. H., 'Distance between sets as an objective measure of retrieval effectiveness', *Information Storage and Retrieval*, 9, 181-198 (1973)
- HEMPEL, C. G., *Aspects of scientific explanation and other essays in the philosophy of science*, The Free Press, New York, 137-154 (1965)
- HIGGINS, L. D. and SMITH, F. J., 'Disc access algorithms', *Computer Journal*, 14, 249-253 (1971)
- HILL, D. R., 'A vector clustering technique', *In Mechanised Information Storage, Retrieval and Dissemination* (Edited by Samuelson), North-Holland, Amsterdam (1968)
- HSIAO, D. and HARARY, F., 'A formal system for information retrieval from files', *Communications of the ACM*, 13, 67-73 (1970)
- HYVARINEN, L., 'Classification of qualitative data', *BIT, Nordisk Tidskrift för Informationsbehandling*, 2, 83-89 (1962)
- IVIE, E. L., 'Search procedures based on measures of relatedness between documents', Ph.D. Thesis, M.I.T., Report MAC-TR-29 (1966)
- JARDINE, N. and SIBSON, R., *Mathematical Taxonomy*, Wiley, London and New York (1971)
- JARDINE, N. and VAN RIJSBERGEN, C. J., 'The use of hierachic clustering in information retrieval', *Information Storage and Retrieval*, 7, 217-240 (1971)
- JOHNSON, D. B. and LAFUENTE, J. M., 'A controlled single pass classification algorithm with application to multilevel clustering', *In Report ISR-18 to the National Science Foundation and the National Library of Medicine* (1970)
- KEEN, E. M., 'Evaluation parameters', *In Report ISR-13 to the National Science Foundation, Section II*, Cornell University, Department of Computer Science (1967)
- KEEN, E. M. and DIGGER, J. A., Report of an Information Science Index Languages Test, Aberystwyth College of Librarianship, Wales (1972)
- KEENAN, E. L., 'On semantically based grammar', *Linguistic Inquiry*, 3, 413-461 (1972)
- KENDALL, M. G., *In Multivariate Analysis* (Edited by P. R. Krishnaiah), Academic Press, London and New York, 165-184 (1966)
- KERCHNER, M. D., 'Dynamic document processing in clustered collections', Ph.D. Thesis, Cornell University. Report ISR-19 to National Science Foundation and to the National Library of Medicine (1971)

BIBLIOGRAPHY

- KING, D. W. and BRYANT, E. C., *The Evaluation of Information Services and Products*, Information Resources Press, Washington (1971)
- KNUTH, D. E., *The Art of Computer Programming*, Vol. 1, *Fundamental Algorithms*, Addison-Wesley, Reading, Massachusetts (1968)
- KNUTH, D. E., *The Art of Computer Programming*, Vol. 3, *Sorting and Searching*, Addison-Wesley, Reading, Massachusetts (1973)
- KOCHEN, M., *The Growth of Knowledge — Readings on Organisation and Retrieval of Information*, Wiley, New York (1967)
- KRANTZ, D. H., LUCE, R. D., SUPPES, P. and TVERSKY, A., *Foundations of Measurement*, Volume 1 *Additive and Polynomial Representation*, Academic Press, London and New York (1971)
- KUHNS, J. L., 'The continuum of coefficients of association', *In Statistical Association Methods for Mechanised Documentation* (Edited by Stevens et al.), National Bureau of Standards, Washington, 33-39 (1965)
- LANCASTER, F. W., *Information Retrieval Systems: Characteristics, Testing and Evaluation*, Wiley, New York (1968)
- LEFKOVITZ, D., *File structures for on-line systems*, Spartan Books, New York (1969)
- LERMAN, I. C., *Les Bases de la Classification Automatique*, Gauthier-Villars, Paris (1970)
- LESK, M. E. and SALTON, G., 'Relevance assessments and retrieval system evaluation', *Information Storage and Retrieval*, 4, 343-359 (1969)
- LIEBERMAN, B., *Contemporary Problems in Statistics*, Oxford University Press, New York (1971)
- LITOFSKY, B., 'Utility of automatic classification systems for information storage and retrieval', Ph.D. Thesis, University of Pennsylvania (1969)
- LOVINS, B. J., 'Development of a stemming algorithm', *Mechanical Translation and Computational Linguistics*, 11, 22-31 (1968)
- LOVINS, B. J., 'Error evaluation for stemming algorithms as clustering algorithms', *Journal of the American Society for Information Science*, 22, 28-40 (1971)
- LUHN, H. P., 'A statistical approach to mechanised encoding and searching of library information', *IBM Journal of Research and Development*, 1, 309-317 (1957)
- LUHN, H. P., 'The automatic creation of literature abstracts', *IBM Journal of Research and Development*, 2, 159-165 (1958)
- LUM, V. Y., LING, H. and SENKO, M. E., 'Analysis of a complex data management access method by simulation modelling', *Proceedings AFIP Fall Joint Computer Conference*, 211-222 (1970)
- LUM, V. Y., YUEN, P. S. T., and DODD, M., 'Key-to-address transform techniques: a fundamental performance study on large existing formatted files', *Communications of the ACM*, 14, 228-239 (1971)
- McCARN, D. B. and LEITER, J., 'On-line services in medicine and beyond', *Science*, 181, 318-324 (1973)
- McDONELL, K. J. and MONTGOMERY, A. Y., 'The design of indexed sequential files', *The Australian Computer Journal*, 5, 115-126 (1973)
- MACNAUGHTON-SMITH, P., *Some Statistical and Other Numerical Techniques for Classifying Individuals*, Studies in the causes of delinquency and the treatment of offenders. Report No. 6, HMSO, London (1965)
- MACQUEEN, J. 'Some methods for classification and analysis of multivariate observations', *In Proceedings of the Fifth Berkeley Symposium on Mathematical Statistics and Probability*, 1965, University of California Press, 281-297 (1967)
- MARON, M. E., 'Automatic indexing: an experimental enquiry', *Journal of the ACM*, 8, 404-417 (1961)

BIBLIOGRAPHY

- MARON, M. E. and KUHNS, J. L., 'On relevance, probabilistic indexing and information retrieval', *Journal of the ACM*, 7, 216-244 (1960)
- MARSCHAK, J., 'Economics of information systems', *Journal of the American Statistical Association*, 66, 192-219 (1971)
- MEALEY, G. H., 'Another look at data', *Proceedings AFIP Fall Joint Computer Conference*, 525-534 (1967)
- Medline Reference Manual, MEDLARS Management Section, Bibliographic Services Division, National Library of Medicine.
- MILLER, W. L., 'A probabilistic search strategy for MEDLARS', *Journal of Documentation*, 27, 254-266 (1971)
- MINKER, J., WILSON, G. A. and ZIMMERMAN, B. H., 'An evaluation of query expansion by the addition of clustered terms for a document retrieval system', *Information Storage and Retrieval*, 8, 329-348 (1972)
- MINSKY, M., *Semantic Information Processing*, MIT Press, Cambridge, Massachusetts (1968)
- MONTGOMERY, C. A., 'Linguistics and Information Science', *Journal of the American Society for Information Science*, 23, 195-219 (1972)
- MORRIS, R., 'Scatter storage techniques', *Communications of the ACM*, 11, 35-38(1968)
- MURRAY, D. M., 'A scatter storage scheme for dictionary lookups', In Report ISR-16 to the National Science Foundation, Section II, Cornell University, Department of Computer Science (1969)
- MURRAY, D. M., 'Document retrieval based on clustered files', Ph.D. Thesis, Cornell University. Report ISR-20 to National Science Foundation and to the National Library of Medicine (1972)
- NEEDHAM, R. M., 'The application of digital computers to classification and grouping', Ph.D. Thesis, University of Cambridge (1961)
- NEEDHAM, R. M., 'Problems of scale in automatic classification', In *Statistical Association Methods for Mechanised Documentation* (abstract) (Edited by M. E. Stevens et al.), National Bureau of Standards, Washington (1965)
- NEGOITA, C. V., 'On the application of the fuzzy sets separation theorem for automatic classification in information retrieval systems', *Information Sciences*, 5, 279-286 (1973)
- NEGOITA, C. V., 'On the notion of relevance', *Kybernetes*, 2, 161-165 (1973)
- NEGOITA, C. V., 'On the decision process in information retrieval', *Studii si cercetari de documentare*, 15, 269-281 (1973)
- NEGUS, A. E. and HALL, J. L., 'Towards an effective on-line reference retrieval system', Library Memo CLM-LM2/71, U.K. Atomic Energy Authority, Research Group (1971)
- NILSSON, N. J., *Learning Machines - Foundations of Trainable Pattern Classifying Systems*, McGraw-Hill, New York (1965)
- ÖRE, O., *Graphs and Their Uses*, Random House, New York (1963)
- PAGE, E. S. and WILSON, L. B., *Information Representation and Manipulation in a Computer*, Cambridge University Press, Cambridge (1973)
- PATT, Y. N., 'Minimum search tree structure for data partitioned into pages', *IEEE Transactions on Computers*, C-21, 961-967 (1972)
- PREPARATA, F. F. and CHIEN, R. T., 'On clustering techniques of citation graphs', Report R-349, Co-ordinated Science Laboratory, University of Illinois, Urbana, Illinois (1967)
- PRYWES, N. S. and SMITH, D. P., 'Organization of information', *Annual Review of Information Science and Technology*, 7, 103-158 (1972)
- RICKMAN, J. T., 'Design consideration for a boolean search system with automatic relevance feedback processing', *Proceedings of the ACM 1972 Annual Conference*, 478-481 (1972)

BIBLIOGRAPHY

- RIEBER, S. and MARATHE, U. P., 'The single pass clustering method', *In Report ISR-16 to the National Science Foundation, Cornell University, Department of Computer Science* (1969)
- ROBERTS, D. C., 'File Organization Techniques'. *Advances in Computers*, **12**, 115-174 (1972)
- ROBERTSON, S. E., 'The parameter description of retrieval tests', Part 1; The basic parameters, *Journal of Documentation*, **25**, 1-27 (1969)
- ROBERTSON, S. E., 'The parametric description of retrieval tests', Part 2; Overall measures, *Journal of Documentation*, **25**, 93-107 (1969)
- ROCCHIO, J. J., 'Document retrieval systems - Optimization and evaluation', Ph.D. Thesis, Harvard University, Report ISR-10 to National Science Foundation, Harvard Computation Laboratory (1966)
- SALTON, G., 'Manipulation of trees in information retrieval', *Communications of the ACM*, **5**, 103-114 (1962)
- SALTON, G., *Automatic Information Organization and Retrieval*, McGraw-Hill, New York (1968)
- SALTON, G., Automatic text analysis', *Science*, **168**, 335-343 (1970)
- SALTON, G., *The SMART Retrieval System - Experiment in Automatic Document Processing*, Prentice-Hall, Englewood Cliffs, New Jersey (1971)
- SALTON, G., 'Experiments in automatic thesaurus construction for information retrieval', Proceedings IFIP Congress 1971, TA-2, 43-49 (1971)
- SALTON, G., 'The "generality" effect and the retrieval evaluation for large collections', *Journal of the American Society for Information Science*, **23**, 11-22 (1972)
- SALTON, G., Paper given at the 1972 NATO Advanced Study Institute for on-line mechanised information retrieval systems (1972)
- SALTON, G., 'Comment on "an evaluation of query expansion by the addition of clustered terms for a document retrieval system".' *Computing Reviews*, **14**, 232 (1973)
- SALTON, G., *A Theory of Indexing*, Technical report No. TR74-203, Department of Computer Science, Cornell University, Ithaca, New York (1974)
- SALTON, G. and YANG, C. S., 'On the specification of term values in automatic indexing', *Journal of Documentation*, **29**, 351-372 (1973)
- SARACEVIC, T., *Introduction to Information Science*, P. R. Bowker, New York and London (1970)
- SCHECTER, G., *Information Retrieval: A Critical View*, Academic Press, London (1967)
- SCHULTZ, C. K., *H. P. Luhn: Pioneer of Information Science - Selected Works*, Macmillan, London (1968)
- SENKO, M. E., 'Information storage and retrieval system', *In Advances in Information Systems Science* (Edited by J. Tou), Plenum Press, New York (1969)
- SENKO, M. E., 'File organization and management information systems', *Annual Review of Information Science and Technology*, **4**, 111-134 (1969)
- SHANNON, C. E. and WEAVER, W., *The Mathematical Theory of Communication*, University of Illinois Press, Urbana (1964)
- SIBSON, R., 'Some observations of a paper by Lance and Williams', *The Computer Journal*, **14**, 156-157 (1971)
- SIBSON, R., 'Order invariant methods for data analysis', *Journal of the Royal Statistical Society, Series B*, **34**, No. 3, 311-349 (1972)
- SIEGEL, S., *Nonparametric Statistics for the Behavioural Sciences*, McGraw-Hill, New York (1956)
- SIMON, H. A., 'On a class of skew distributions', *Biometrika*, **42**, 425-440 (1955)
- SIMON, J. C. and GUIHO, G., 'On algorithms preserving neighbourhood to file

BIBLIOGRAPHY

- and retrieve information in a memory', *International Journal Computer Information Sciences*, **1**, 3-15 (CR 23923) (1972)
- SNEATH, P. H. A. and SOKAL, R. R., *Numerical Taxonomy: The Principles and Practice of Numerical Classification*, W. H. Freeman and Company, San Francisco (1973)
- SPARCK JONES, K., 'Some thoughts on classification for retrieval', *Journal of Documentation*, **26**, 89-101 (1970)
- SPARCK JONES, K., *Automatic Keyword Classification for Information Retrieval*, Butterworths, London (1971)
- SPARCK JONES, K., 'A statistical interpretation of term specificity and its application in retrieval', *Journal of Documentation*, **28**, 11-21 (1972)
- SPARCK JONES, K., 'Index term weighting', *Information Storage and Retrieval*, **9**, 619-633 (1973)
- SPARCK JONES, K., 'Does indexing exhaustivity matter?', *Journal of the American Society for Information Science*, **24**, 313-316 (1973)
- SPARCK JONES, K., *Automatic Indexing: A State of the Art Review*, review commissioned by the Office for Scientific and Technical Information, London (1974)
- SPARCK JONES, K. and JACKSON, D. M., 'The use of automatically-obtained keyword classifications for information retrieval', *Information Storage and Retrieval*, **5**, 175-201 (1970)
- SPARCK JONES, K. and KAY, M., *Linguistics and Information Science*, Academic Press, New York and London (1973)
- STANFEL, L. E., 'Sequential adaptation of retrieval systems based on user inputs', *Information Storage and Retrieval*, **7**, 69-78 (1971)
- STANFEL, L. E., 'Practical aspects of doubly chained trees for retrieval', *Journal of the ACM*, **19**, 425-436 (1972)
- STANFEL, L. E., 'Optimal trees for a class of information retrieval problems', *Information Storage and Retrieval*, **9**, 43-59 (1973)
- STEVENS, M. E., *Automatic Indexing: A State of the Art Report*, Monograph 91, National Bureau of Standards, Washington (1965)
- STEVENS, M. E., GIULIANO, V. E. and HEILPRIN, L. B., *Statistical Association Methods for Mechanised Documentation*, National Bureau of Standards, Washington (1964)
- STILES, H. F., 'The association factor in information retrieval', *Journal of the ACM*, **8**, 271-279 (1961)
- SUSSENGUTH, E. H., 'Use of tree structures for processing files', *Communications of the ACM*, **6**, 272-279 (1963)
- SWETS, J. A., 'Information retrieval systems', *Science*, **141**, 245-250 (1963)
- SWETS, J. A., *Effectiveness of Information Retrieval Methods*, Bolt, Beranek and Newman, Cambridge, Massachusetts (1967)
- VAN RIJSBERGEN, C. J., 'A clustering algorithm', *Computer Journal*, **13**, 113-115 (1970)
- VAN RIJSBERGEN, C. J., 'An algorithm for information structuring and retrieval', *The Computer Journal*, **14**, 407-412 (1971)
- VAN RIJSBERGEN, C. J., 'Further experiments with hierachic clustering in document retrieval', *Information Storage and Retrieval*, **10**, 1-14 (1974)
- VAN RIJSBERGEN, C. J., 'The best-match problem in document retrieval', *Communications of the ACM*, **17**, 648-649 (1974)
- VAN RIJSBERGEN, C. J. and SPARCK JONES, K., 'A test for the separation of relevant and non-relevant documents in experimental retrieval collections', *Journal of Documentation*, **29**, 251-257 (1973)
- VASWANI, P. K. T. and CAMERON, J. B., *The National Physical Laboratory*

BIBLIOGRAPHY

- Experiments in Statistical Word Associations and their Use in Document Indexing and Retrieval*, Publication 42, National Physical Laboratory, Division of Computer Science (1970)
- VERHOEFF, J., GOFFMAN, W. and BELZER, J., 'Inefficiency of the use of boolean functions for information retrieval systems', *Communications of the ACM*, 4, 557-558, 594 (1961)
- VICKERY, B. C., *Techniques of Information Retrieval*, Butterworths, London (1970)
- WATANABE, S., *Knowing and Guessing*, Wiley, New York (1969)
- WEILER, G., 'On relevance', *Mind*, LXXI, 487-493 (1962)
- WINDLEY, P. F., 'Trees, forests and rearranging', *Computer Journal*, 3, 84-88 (1960)
- WINOGRAD, T., *Understanding Natural Language*, Edinburgh University Press, Edinburgh (1972)
- WISHART, D., *FORTRAN II program for 8 methods of cluster analysis (CLUSTAN I)* Computer Contribution 38 State Geological Survey. The University of Kansas, Lawrence, Kansas, U.S.A. (1969)
- ZADEH, L. A., 'Fuzzy sets', *Information and Control*, 8, 338-353 (1965)
- ZADEH, L. A., 'Similarity relations and fuzzy orderings', *Information Sciences*, 3, 177-200 (1971)
- ZIPF, H. P., *Human Behavior and the Principle of Least Effort*, Addison-Wesley, Cambridge, Massachusetts (1949)