

## Computer Science 415.34?

### Operating systems

#### COLLECTED REFERENCES

- INT1 : M.V. Wilkes : "Software and the programmer", *Comm.ACM* **35#5**, 23 ( May, 1991 ).
- INT2 : K. Skytte : "Engineering a small system", *IEEE Spectrum* **31#3**, 63 ( March, 1994 ).
- INT3 : M.G. Lane, J.D. Mooney : *A practical approach to operating systems* ( Boyd and Fraser, 1988 ).
- INT4 : A. Silberschatz, P.B. Galvin : *Operating system concepts* ( Addison-Wesley, fourth edition, 1994 ).
- INT5 : S.E. Madnick, J.J. Donovan : *Operating systems* ( McGraw-Hill, 1974 ).
- HIS1 : D.D. McCracken, H. Weiss, T.-H. Lee : *Programming Business Computers* ( Wiley, 1959 ).
- HIS2 : *Reference Manual, IBM 1620 Fortran* ( IBM, 1962 ).
- HIS3 : A. Chandor, J. Graham, R. Williamson : *A dictionary of computers* ( Penguin, 1970 ), page 167.
- HIS4 : *B6700 Job Handling* ( User Note 1, Auckland University Computer Centre, September 1979 ).
- HIS5 : J. Johnson et al. : "The Xerox Star : a retrospective", *IEEE Computer* **22#9**, 11 ( September 1989 ). )
- HIS6 : I. Hugo : "Talking heads", *Computing* ( 19 May 1994 ).
- HIS7 : J. Boykin, D. Cheriton : "Operating systems : a vision of the year 2000", *IEEE Computer* **24#9**, 108 ( September, 1991 ).
- HIS8 : D.R. Kuhn : "IEEE's Posix : making progress", *IEEE Spectrum* **28#12**, 36 ( December 1991 ).
- HIS9 : W.H. Cheung, A.H.S. Loong : "Exploring issues of operating systems structuring : from microkernel to extensible systems", *Operating Systems Review* **29#4**, 4-16 ( October, 1995 ).
- REQ1 : J. Nielsen : "Traditional dialogue design applied to modern user interfaces", *Comm.ACM* **33#10**, 109 ( October 1990 ).

- REQ2 : *IBM 1130 Disk Monitor System, Version 2, Programmer's and Operator's Guide*, IBM Corporation, 10th Edition, 1972, pages 5-9.
- REQ3 : *Burroughs B6700 Work Flow Management User's Guide*, Burroughs Corporation, 1973, pages 2-13 ( redrawn for clarity ).
- REQ4 : M.D. Good, J.A. Whiteside, D.R. Wixon, S.J. Jones : "Building a user-derived interface", *Communications of the ACM* **27**, 1032 ( 1984 )
- REQ5 : R. Fulton : *Auckland University Computer Centre news*, 21 March 1986.
- REQ6 : J. Johnson, T.L. Roberts, W. Verplank, D.C. Smith, C.H. Irby, M. Beard, K. Mackey : "The Xerox Star : a retrospective", *IEEE Computer* **22#9**, 11 ( September 1989 ).
- REQ7 : R. Tagg, M. Sandford : "Where to now that the mouse has arrived ?", *Computer Bulletin Series 2 #42*, 2 ( December, 1984 ).
- REQ8 : Jane Lawrence : "Common ground ?", *Computing* ( 8 December 1988 ).
- REQ9 : R. Miles, *Computing* ( 4 July 1991 ).
- REQ10 : S.H. Davis : "Design of VMS volume shadowing phase II – host-based shadowing", *Digital Technical Journal* **3#3**, 7 ( Summer, 1991 )
- REQ11 : R. Rohde, J. Haskett : "Disaster recovery planning for academic computing centers", *Comm.ACM.* **33**, 653 ( 1990 ).
- REQ12 : Karen Fitzgerald : "The quest for intruder-proof computer systems", *IEEE Spectrum* **26#8**, 22 ( August 1989 ).
- REQ13 : *Communications of the ACM.* **32**, 677-710 ( 1989 ) : several papers presented as a special section.
- REQ14 : *New Zealand Herald*, 12 February 1987.
- REQ15 : S.J. Mullender, G. van Rossum, A.S. Tanenbaum, R. van Renesse, H. van Staveren : *IEEE Computer* **23#5**, 44 ( May 1990 ). )
- REQ16 : M. Anderson, R.D. Pose, C.S. Wallace : *Computer Journal* **29**, 1 ( 1986 ).
- SUP1 : G.A. Creak : *Cobol using the Stubol compiler* ( Auckland University Computer Centre, 1975 ).
- SUP2 : D. Dean, R. Zippel : "Matching data storage to application needs", *Operating Systems Review* **29#1**, 68 ( January, 1995 ).
- SUP3 : *Inside Macintosh*, volume 1 ( Addison-Wesley, 1985 ).
- SUP4 : *Inside Macintosh*, volume 4 ( Addison-Wesley, 1985 ).
- SUP5 : M.D. Byrne : "The misunderstood picture : a study of icon recognition", *Sigchi Bulletin* **34#4**, 37-38 ( October, 1991 ).

- SUP6 : A. Bartioli, S.J. Mullender, M. van der Valk : "Wide address spaces – exploring the design space", *Operating Systems Review* **27#1**, 11 ( January 1993 )
- SUP7 : R. Staehli, J. Walpole : "Constrained latency storage access", *IEEE Computer* **26#3**, 44 ( March, 1993 ).
- SUP8 : W.S. Gilbert : *H.M.S. Pinafore or The Lass That Loved a Sailor* (May 28, 1878 ) ( or try <http://diamond.idbsu.edu/GaS/pinafore/libretto.txt> )
- SUP9 : *Inside Macintosh*, volume 2 chapter 2 and volume 3 chapter 1 ( Addison-Wesley, 1985 ).
- SUP10 : P. Druschel : "Operating system support for high-speed communication", *Comm.ACM* **39#9**, 41-51 ( September, 1996 ).
- SUP11 : F.W. Burton, M.H. Huntbach, J.G. Kollias : "Multiple generation text files using overlapping tree structures", *Computer Journal* **28**, 414 ( 1985 ).
- SUP12 : C.B. Kreitzberg, B. Shneiderman : *Fortran programming a spiral approach* ( Harcourt Brace Jovanovich, 1975 ), page 288.
- SUP13 : M.A. Auslander, H.R. Strong : "Systematic recursion removal", *Comm.ACM* **21**, 127 ( 1978 ).
- SUP14 : D.W. Barron : *Recursive techniques in programming* ( Macdonald/Elsevier, 1968 ), Preface.
- SUP15 : J. McCarthy : "Recursive functions of symbolic expressions and their computation by machine", *Comm.ACM* **3**, 184 ( 1960 ), reprinted in *Programming Systems and Languages* ( ed. S. Rosen, McGraw-Hill, 1967 ).
- SUP16 : S.H. Hollingdale, G.C. Tootill : *Electronic computers* ( Penguin, 1965 ), page 131.
- SUP17 : R.R. Oldehoeft, S.J. Allan : "Adaptive exact-fit storage management", *Comm.ACM* **28**, 506 ( 1985 ).
- SUP18 : D.E. Knuth : *Fundamental Algorithms* - part 1 of *The Art of Computer programming* ( Addison-Wesley, 1972 ), page 445.
- SUP19 : D. Naor, C.U. Martel, N.S. Matloff : "Performance of priority queue structures in a virtual memory environment", *Computer Journal* **34**, 428 ( 1991 )
- SUP20 : B. Meredith : *Online transaction processing systems*, Project report, Auckland University Computer Science Department, 1990.
- SUP21 : S.E. Madnick, J.J. Donovan : *Operating Systems* ( McGraw-Hill, 1974 ), page 505.
- SUP22 : Y.N. Patt : "Experimental research in computer architecture", *IEEE Computer* **24#1**, 14 ( January 1991 ).
- EXE1 : A.H. Veen : "Dataflow machine architecture", *Computing Surveys* **18**, 365 ( 1986 ).
- EXE2 : *THINK Reference* ( Symantec Corporation, 1992 ).

- EXE3 : A.S. Tanenbaum : *Operating systems design and implementation* ( Prentice-Hall, 1987 ).
- EXE4 : M.J. Bach : *The design of the Unix operating system* ( Prentice-Hall, 1986 ).
- EXE5 : E.E. Dijkstra : "Cooperating sequential processes", in *Programming Languages* ( ed. F. Gennys, Academic Press, 1965 ).
- EXE6 : D.P. Reed, R.K. Kanodia : "Synchronization with event counts and sequencers", *Proceedings of the sixth ACM Symposium on Operating Systems Principles*, 1977.
- EXE7 : A.S. Tanenbaum : *Modern operating systems* ( Prentice-Hall, 1992 ).
- IMP1 : H.A. Schutz : "On the design of a language for programming real-time concurrent processes", *IEEE Transactions on Software Engineering* **5**, 248 ( 1979 )
- IMP2 : P. Levy, S. Hanson, P. Jackson, R. Jullig, T. Pittman : "Summary of the characteristics of several 'modern' programming languages", *Sigplan Notices* **14#5**, 54 ( May, 1979 )
- IMP3 : N. Wirth : "A plea for lean software", *IEEE Computer* **28#2**, 64 ( February, 1995 ).
- IMP4 : E. Nather : *The Story of Mel, a Real Programmer*, [http://www.datamation.com/PlugIn/humor/jargon/jargon\\_48.html](http://www.datamation.com/PlugIn/humor/jargon/jargon_48.html) ( May 21, 1983 ).
- IMP5 : B.W. Kernighan, D.M. Ritchie : *The C programming language* ( Prentice-Hall, 1978 ).
- IMP6 : B. Stroustrup : *The C++ programming language* ( Addison Wesley, 2nd ed., 1991 ).
- IMP7 : G. Orwell : *Nineteen Eighty Four* ( Penguin Books, 1954 ).
- IMP8 : H.G. Baker : "I have a feeling we're not in Emerald City anymore", *Sigplan Notices* **32#4**, 22-26 ( April, 1997 )
- IMP9 : J.L. Peterson, A. Silberschatz : *Operating System Concepts* ( Addison-Wesley, 2nd Edition, 1985 )
- IMP10 : N. Wirth : "Towards a discipline of real-time programming", *Comm.ACM* **20**, 577 ( 1977 )
- IMP11 : C.J. Theaker, G.R. Brookes : *A Practical Course on Operating Systems* ( Macmillan, 1983 )
- IMP12 : D. May : "OCCAM", *Sigplan Notices* **18#4**, 69 ( April 1983 )
- IMP13 : S. Ahuja, N. Carriero, D. Gelernter : "Linda and friends", *IEEE Computer* **19#8**, 26 ( August 1986 ).
- IMP14 : N. Carriero, D. Gelernter : "Linda in context", *Communications of the ACM* **32**, 444 ( 1989 ).

- IMP15 : W. Leler : "Linda meets Unix", *IEEE Computer* **23#2**, 43 ( February 1990 ).
- IMP16 : *Bartlett's Familiar Quotations* ( Little, Brown, 15th ed., 1980 ), page 536.
- IMP17 : G. Radin, H.P. Rogoway : "Highlights of a new programming language", *Comm.ACM.* **8**, 9 ( 1965 ), reprinted in *Programming systems and languages* ( S. Rosen, editor : McGraw-Hill, 1967 ).
- IMP18 : V. Srinivasan, J.C. Mogul : "Spritely NFS : experiments with cache-consistency protocols", *Operating Systems Review* **23#5**, 45 ( 1989 ).
- IMP19 : W.K. Edwards, E.D. Mynatt : "An architecture for transforming graphical interfaces", *UIST '94 Seventh Annual Symposium on User Interface Software and Technology* ( ACM Press, 1994 ), 39.
- IMP20 : L.P. Treggiari, M.D. Collins : "Development of the XUI toolkit", *Digital Technical Journal* **2#3**, 24 ( "Summer" 1990 ).
- IMP21 : Lane and Mooney<sup>INT3</sup>, Section 21.2.
- IMP22 : *Microsoft MS-DOS version 3.2 User's reference*, Zenith Data Systems Corporation, 1986.
- IMP23 : *Using Applescript* ( Apple Computer, 1994 : Documentation with the Applescript package. )
- IMP24 : R.F. Lary, R.G. Bean : "The hierarchical storage controller; a tightly coupled multiprocessor as storage server", *Digital Technical Journal* **#8**, 8 ( February, 1989 ).
- IMP25 : S. Muir, D. Hutchison, D. Shepherd : "Arca : a local network file server", *Computer Journal* **28**, 243 ( 1985 )
- IMP26 : J. Ousterhout, F. Douglass : "Beating the I/O bottleneck : a case for log-structured file systems", *Operating Systems Review* **23#1**, 11 ( January 1989 )
- IMP27 : M. Rosenblum, J.K. Ousterhout : "The design and implementation of a log-structured file system", *Operating Systems Review* **25#5**, 1 ( Special issue, 1991 ).
- IMP28 : G.R. Ganger, B.L. Worthington, R.Y. Hou, Y.N. Patt : "Disk arrays high-performance, high-reliability storage subsystems", *IEEE Computer* **27#3**, 30 ( March, 1994 ).
- IMP29 : G.A. Gibson, L. Hellerstein, R.M. Karp, R.H. Katz, D.A. Patterson : "Failure correction techniques for large disk arrays", Proceedings of the third international conference on architectural support for programming languages and operating systems, *Operating Systems Review* **23** Special Issue, 123 ( April 1989 ).
- IMP30 : A. Anderson : *Vax Archiver ( Univault ) user's guide*, Auckland University Computer Centre C.C. Note #54, 1987.

- IMP31 : J.N. Brownlee : *IBM4341 Archiver user's guide*, Auckland University Computer Centre C.C. Note #55, 1987.
- IMP32 : Acknowledgments to A.M. Lister, *Fundamentals of operating systems* ( Macmillan, second edition, 1979 ), pages 66 and 68
- IMP33 : *Inside Macintosh*, vol. 2 ( Addison-Wesley, 1985 ).
- IMP34 : M. Donnelly : "Making I/O go faster", *Computing*, 5 January 1989, page 14.
- MAN1 : V.E. Barker, D.E. O'Connor : "Expert systems for configuration at Digital : Xcon and beyond", *Comm.ACM* **32**, 298 ( 1989 ).
- MAN2 : H. Wills : "Fundamentals of pricing and scheduling computer services and investment in computer equipment", *Computer Journal* **33**, 266 ( 1990 )
- MAN3 : *Computing*, 13 May 1993, page 22.
- MAN4 : J.G. Hunt : "Detection of deadlocks in multiprocess systems", *Sigplan Notices* **21#1**, 46 ( January, 1986 ).
- MAN5 : A.M. Andrew : "The smallest operating system", *Computer Bulletin Series 3*, **2#4**, 40 ( December 1986 ).

Computer science (or computing science) is the study and the science of the theoretical foundations of information and computation and their implementation and application in computer systems. Computer science has many sub-fields; some emphasize the computation of specific results (such as graphics), while others relate to properties of computational problems (such as computational complexity theory). Still others focus on the challenges in implementing computations. For example, programming language Computer science is the study of computation and information. Computer science deals with theory of computation, algorithms, computational problems and the design of computer systems hardware, software and applications. Computer science addresses both human-made and natural information processes, such as communication, control, perception, learning and intelligence especially in human-made computing systems and machines.