
Bibliography

- [Accetta et al. 1986]** M. Accetta, R. Baron, W. Bolosky, D. B. Golub, R. Rashid, A. Tevanian, and M. Young, “Mach: A New Kernel Foundation for UNIX Development”, *Proceedings of the Summer USENIX Conference* (1986), pages 93–112.
- [Adl-Tabatabai et al. 2007]** A.-R. Adl-Tabatabai, C. Kozyrakis, and B. Saha, “Unlocking Concurrency”, *Queue*, Volume 4, Number 10 (2007), pages 24–33.
- [Agre 2003]** P. E. Agre, “P2P and the Promise of Internet Equality”, *Communications of the ACM*, Volume 46, Number 2 (2003), pages 39–42.
- [Ahituv et al. 1987]** N. Ahituv, Y. Lapid, and S. Neumann, “Processing Encrypted Data”, *Communications of the ACM*, Volume 30, Number 9 (1987), pages 777–780.
- [Ahmed 2000]** I. Ahmed, “Cluster Computing: A Glance at Recent Events”, *IEEE Concurrency*, Volume 8, Number 1 (2000).
- [Akl 1983]** S. G. Akl, “Digital Signatures: A Tutorial Survey”, *Computer*, Volume 16, Number 2 (1983), pages 15–24.
- [Akyurek and Salem 1993]** S. Akyurek and K. Salem, “Adaptive Block Rearrangement”, *Proceedings of the International Conference on Data Engineering* (1993), pages 182–189.
- [Alt 1993]** H. Alt, “Removable Media in Solaris”, *Proceedings of the Winter USENIX Conference* (1993), pages 281–287.
- [Anderson 1990]** T. E. Anderson, “The Performance of Spin Lock Alternatives for Shared-Memory Multiprocessors”, *IEEE Trans. Parallel Distrib. Syst.*, Volume 1, Number 1 (1990), pages 6–16.
- [Anderson et al. 1989]** T. E. Anderson, E. D. Lazowska, and H. M. Levy, “The Performance Implications of Thread Management Alternatives for Shared-Memory Multiprocessors”, *IEEE Transactions on Computers*, Volume 38, Number 12 (1989), pages 1631–1644.

- [Anderson et al. 1991]** T. E. Anderson, B. N. Bershad, E. D. Lazowska, and H. M. Levy, “Scheduler Activations: Effective Kernel Support for the User-Level Management of Parallelism”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1991), pages 95–109.
- [Asthana and Finkelstein 1995]** P. Asthana and B. Finkelstein, “Superdense Optical Storage”, *IEEE Spectrum*, Volume 32, Number 8 (1995), pages 25–31.
- [Bach 1987]** M. J. Bach, *The Design of the UNIX Operating System*, Prentice Hall (1987).
- [Back et al. 2000]** G. Back, P. Tullman, L. Stoller, W. C. Hsieh, and J. Lepreau, “Techniques for the Design of Java Operating Systems”, *2000 USENIX Annual Technical Conference* (2000).
- [Baker et al. 1991]** M. G. Baker, J. H. Hartman, M. D. Kupfer, K. W. Shirriff, and J. K. Ousterhout, “Measurements of a Distributed File System”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1991), pages 198–212.
- [Balakrishnan et al. 2003]** H. Balakrishnan, M. F. Kaashoek, D. Karger, R. Morris, and I. Stoica, “Looking up Data in P2P Systems”, *Communications of the ACM*, Volume 46, Number 2 (2003), pages 43–48.
- [Barnes 1993]** G. Barnes, “A Method for Implementing Lock-Free Shared Data Structures”, *Proceedings of the ACM Symposium on Parallel Algorithms and Architectures* (1993), pages 261–270.
- [Barrera 1991]** J. S. Barrera, “A Fast Mach Network IPC Implementation”, *Proceedings of the USENIX Mach Symposium* (1991), pages 1–12.
- [Basu et al. 1995]** A. Basu, V. Buch, W. Vogels, and T. von Eicken, “U-Net: A User-Level Network Interface for Parallel and Distributed Computing”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1995).
- [Bays 1977]** C. Bays, “A Comparison of Next-Fit, First-Fit and Best-Fit”, *Communications of the ACM*, Volume 20, Number 3 (1977), pages 191–192.
- [Belady 1966]** L. A. Belady, “A Study of Replacement Algorithms for a Virtual-Storage Computer”, *IBM Systems Journal*, Volume 5, Number 2 (1966), pages 78–101.
- [Belady et al. 1969]** L. A. Belady, R. A. Nelson, and G. S. Shedler, “An Anomaly in Space-Time Characteristics of Certain Programs Running in a Paging Machine”, *Communications of the ACM*, Volume 12, Number 6 (1969), pages 349–353.
- [Bellovin 1989]** S. M. Bellovin, “Security Problems in the TCP/IP Protocol Suite”, *Computer Communications Review*, Volume 19:2, (1989), pages 32–48.
- [Ben-Ari 1990]** M. Ben-Ari, *Principles of Concurrent and Distributed Programming*, Prentice Hall (1990).
- [Benjamin 1990]** C. D. Benjamin, “The Role of Optical Storage Technology for NASA”, *Proceedings, Storage and Retrieval Systems and Applications* (1990), pages 10–17.

- [Bershad 1993]** B. Bershad, “Practical Considerations for Non-Blocking Concurrent Objects”, *IEEE International Conference on Distributed Computing Systems* (1993), pages 264–273.
- [Bershad and Pinkerton 1988]** B. N. Bershad and C. B. Pinkerton, “Watchdogs: Extending the Unix File System”, *Proceedings of the Winter USENIX Conference* (1988).
- [Bershad et al. 1990]** B. N. Bershad, T. E. Anderson, E. D. Lazowska, and H. M. Levy, “Lightweight Remote Procedure Call”, *ACM Transactions on Computer Systems*, Volume 8, Number 1 (1990), pages 37–55.
- [Bershad et al. 1995]** B. N. Bershad, S. Savage, P. Pardyak, E. G. Sirer, M. Fiuczynski, D. Becker, S. Eggars, and C. Chambers, “Extensibility, Safety and Performance in the SPIN Operating System”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1995), pages 267–284.
- [Beveridge and Wiener 1997]** J. Beveridge and R. Wiener, *Mutithreading Applications in Win32*, Addison-Wesley (1997).
- [Binding 1985]** C. Binding, “Cheap Concurrency in C”, *SIGPLAN Notices*, Volume 20, Number 9 (1985), pages 21–27.
- [Birrell 1989]** A. D. Birrell, “An Introduction to Programming with Threads”, Technical report, DEC-SRC (1989).
- [Birrell and Nelson 1984]** A. D. Birrell and B. J. Nelson, “Implementing Remote Procedure Calls”, *ACM Transactions on Computer Systems*, Volume 2, Number 1 (1984), pages 39–59.
- [Blaauw and Brooks 1997]** G. Blaauw and F. Brooks, *Computer Architecture: Concepts and Evolution*, Addison-Wesley (1997).
- [Black 1990]** D. L. Black, “Scheduling Support for Concurrency and Parallelism in the Mach Operating System”, *IEEE Computer*, Volume 23, Number 5 (1990), pages 35–43.
- [Bonwick 1994]** J. Bonwick, “The Slab Allocator: An Object-Caching Kernel Memory Allocator”, *USENIX Summer* (1994), pages 87–98.
- [Bonwick and Adams 2001]** J. Bonwick and J. Adams, “Magazines and Vmem: Extending the Slab Allocator to Many CPUs and Arbitrary Resources”, *Proceedings of the 2001 USENIX Annual Technical Conference* (2001).
- [Bovet and Cesati 2002]** D. P. Bovet and M. Cesati, *Understanding the Linux Kernel, Second Edition*, O’Reilly & Associates (2002).
- [Bovet and Cesati 2006]** D. Bovet and M. Cesati, *Understanding the Linux Kernel, Third Edition*, O’Reilly & Associates (2006).
- [Brain 1996]** M. Brain, *Win32 System Services, Second Edition*, Prentice Hall (1996).
- [Brent 1989]** R. Brent, “Efficient Implementation of the First-Fit Strategy for Dynamic Storage Allocation”, *ACM Transactions on Programming Languages and Systems*, Volume 11, Number 3 (1989), pages 388–403.

- [Brinch-Hansen 1970]** P. Brinch-Hansen, “The Nucleus of a Multiprogramming System”, *Communications of the ACM*, Volume 13, Number 4 (1970), pages 238–241 and 250.
- [Brinch-Hansen 1972]** P. Brinch-Hansen, “Structured Multiprogramming”, *Communications of the ACM*, Volume 15, Number 7 (1972), pages 574–578.
- [Brinch-Hansen 1973]** P. Brinch-Hansen, *Operating System Principles*, Prentice Hall (1973).
- [Brookshear 2003]** J. G. Brookshear, *Computer Science: An Overview, Seventh Edition*, Addison-Wesley (2003).
- [Brown 2000]** K. Brown, *Programming Windows Security*, Addison-Wesley (2000).
- [Burns 1978]** J. E. Burns, “Mutual Exclusion with Linear Waiting Using Binary Shared Variables”, *SIGACT News*, Volume 10, Number 2 (1978), pages 42–47.
- [Butenhof 1997]** D. Butenhof, *Programming with POSIX Threads*, Addison-Wesley (1997).
- [Buyya 1999]** R. Buyya, *High Performance Cluster Computing: Architectures and Systems*, Prentice Hall (1999).
- [Callaghan 2000]** B. Callaghan, *NFS Illustrated*, Addison-Wesley (2000).
- [Cantrill et al. 2004]** B. M. Cantrill, M. W. Shapiro, and A. H. Leventhal, “Dynamic Instrumentation of Production Systems”, *2004 USENIX Annual Technical Conference* (2004).
- [Carr and Hennessy 1981]** W. R. Carr and J. L. Hennessy, “WSClock—A Simple and Effective Algorithm for Virtual Memory Management”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1981), pages 87–95.
- [Chang and Mergen 1988]** A. Chang and M. F. Mergen, “801 Storage: Architecture and Programming”, *ACM Transactions on Computer Systems*, Volume 6, Number 1 (1988), pages 28–50.
- [Chase et al. 1994]** J. S. Chase, H. M. Levy, M. J. Feeley, and E. D. Lazowska, “Sharing and Protection in a Single-Address-Space Operating System”, *ACM Transactions on Computer Systems*, Volume 12, Number 4 (1994), pages 271–307.
- [Chen et al. 1994]** P. M. Chen, E. K. Lee, G. A. Gibson, R. H. Katz, and D. A. Patterson, “RAID: High-Performance, Reliable Secondary Storage”, *ACM Computing Surveys*, Volume 26, Number 2 (1994), pages 145–185.
- [Cheriton 1988]** D. Cheriton, “The V Distributed System”, *Communications of the ACM*, Volume 31, Number 3 (1988), pages 314–333.
- [Cheriton et al. 1979]** D. R. Cheriton, M. A. Malcolm, L. S. Melen, and G. R. Sager, “Thoth, a Portable Real-Time Operating System”, *Communications of the ACM*, Volume 22, Number 2 (1979), pages 105–115.
- [Cheswick et al. 2003]** W. Cheswick, S. Bellovin, and A. Rubin, *Firewalls and Internet Security: Repelling the Wily Hacker*, second edition, Addison-Wesley (2003).

- [Cheung and Loong 1995]** W. H. Cheung and A. H. S. Loong, “Exploring Issues of Operating Systems Structuring: From Microkernel to Extensible Systems”, *Operating Systems Review*, Volume 29, Number 4 (1995), pages 4–16.
- [Chi 1982]** C. S. Chi, “Advances in Computer Mass Storage Technology”, *Computer*, Volume 15, Number 5 (1982), pages 60–74.
- [Cohen and Jefferson 1975]** E. S. Cohen and D. Jefferson, “Protection in the Hydra Operating System”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1975), pages 141–160.
- [Cohen and Woodring 1997]** A. Cohen and M. Woodring, *Win32 Multithreaded Programming*, O'Reilly & Associates (1997).
- [Corbato et al. 1962]** F. J. Corbato, M. Merwin-Daggett, and R. C. Daley, “An Experimental Time-Sharing System”, *Proceedings of the AFIPS Fall Joint Computer Conference* (1962), pages 335–344.
- [Cormen et al. 2001]** T. H. Cormen, C. E. Leiserson, R. L. Rivest, and C. Stein, *Introduction to Algorithms, Second Edition*, MIT Press (2001).
- [Courtois et al. 1971]** P. J. Courtois, F. Heymans, and D. L. Parnas, “Concurrent Control with ‘Readers’ and ‘Writers’”, *Communications of the ACM*, Volume 14, Number 10 (1971), pages 667–668.
- [Culler et al. 1998]** D. E. Culler, J. P. Singh, and A. Gupta, *Parallel Computer Architecture: A Hardware/Software Approach*, Morgan Kaufmann Publishers Inc. (1998).
- [Custer 1994]** H. Custer, *Inside the Windows NT File System*, Microsoft Press (1994).
- [Daley and Dennis 1967]** R. C. Daley and J. B. Dennis, “Virtual Memory, Processes, and Sharing in Multics”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1967), pages 121–128.
- [Davies 1983]** D. W. Davies, “Applying the RSA Digital Signature to Electronic Mail”, *Computer*, Volume 16, Number 2 (1983), pages 55–62.
- [deBruijn 1967]** N. G. deBruijn, “Additional Comments on a Problem in Concurrent Programming and Control”, *Communications of the ACM*, Volume 10, Number 3 (1967), pages 137–138.
- [Deitel 1990]** H. M. Deitel, *An Introduction to Operating Systems, Second Edition*, Addison-Wesley (1990).
- [Denning 1968]** P. J. Denning, “The Working Set Model for Program Behavior”, *Communications of the ACM*, Volume 11, Number 5 (1968), pages 323–333.
- [Denning 1980]** P. J. Denning, “Working Sets Past and Present”, *IEEE Transactions on Software Engineering*, Volume SE-6, Number 1 (1980), pages 64–84.
- [Denning 1982]** D. E. Denning, *Cryptography and Data Security*, Addison-Wesley (1982).
- [Denning 1983]** D. E. Denning, “Protecting Public Keys and Signature Keys”, *Computer*, Volume 16, Number 2 (1983), pages 27–35.

- [Denning 1984]** D. E. Denning, “Digital Signatures with RSA and Other Public-Key Cryptosystems”, *Communications of the ACM*, Volume 27, Number 4 (1984), pages 388–392.
- [Denning and Denning 1979]** D. E. Denning and P. J. Denning, “Data Security”, *ACM Computing Surveys*, Volume 11, Number 3 (1979), pages 227–249.
- [Dennis 1965]** J. B. Dennis, “Segmentation and the Design of Multiprogrammed Computer Systems”, *Communications of the ACM*, Volume 8, Number 4 (1965), pages 589–602.
- [Dennis and Horn 1966]** J. B. Dennis and E. C. V. Horn, “Programming Semantics for Multiprogrammed Computations”, *Communications of the ACM*, Volume 9, Number 3 (1966), pages 143–155.
- [Di Pietro and Mancini 2003]** R. Di Pietro and L. V. Mancini, “Security and Privacy Issues of Handheld and Wearable Wireless Devices”, *Communications of the ACM*, Volume 46, Number 9 (2003), pages 74–79.
- [Diffie and Hellman 1976]** W. Diffie and M. E. Hellman, “New Directions in Cryptography”, *IEEE Transactions on Information Theory*, Volume 22, Number 6 (1976), pages 644–654.
- [Diffie and Hellman 1979]** W. Diffie and M. E. Hellman, “Privacy and Authentication”, *Proceedings of the IEEE* (1979), pages 397–427.
- [Dijkstra 1965a]** E. W. Dijkstra, “Cooperating Sequential Processes”, Technical report, Technological University, Eindhoven, the Netherlands (1965).
- [Dijkstra 1965b]** E. W. Dijkstra, “Solution of a Problem in Concurrent Programming Control”, *Communications of the ACM*, Volume 8, Number 9 (1965), page 569.
- [Dijkstra 1968]** E. W. Dijkstra, “The Structure of the THE Multiprogramming System”, *Communications of the ACM*, Volume 11, Number 5 (1968), pages 341–346.
- [Dijkstra 1971]** E. W. Dijkstra, “Hierarchical Ordering of Sequential Processes”, *Acta Informatica*, Volume 1, Number 2 (1971), pages 115–138.
- [DoD 1985]** *Trusted Computer System Evaluation Criteria*. Department of Defense (1985).
- [Dougan et al. 1999]** C. Dougan, P. Mackerras, and V. Yodaiken, “Optimizing the Idle Task and Other MMU Tricks”, *Proceedings of the Symposium on Operating System Design and Implementation* (1999).
- [Douglis et al. 1994]** F. Douglis, F. Kaashoek, K. Li, R. Caceres, B. Marsh, and J. A. Tauber, “Storage Alternatives for Mobile Computers”, *Proceedings of the Symposium on Operating Systems Design and Implementation* (1994), pages 25–37.
- [Douglis et al. 1995]** F. Douglis, P. Krishnan, and B. Bershad, “Adaptive Disk Spin-Down Policies for Mobile Computers”, *Proceedings of the USENIX Symposium on Mobile and Location Independent Computing* (1995), pages 121–137.

- [Draves et al. 1991]** R. P. Draves, B. N. Bershad, R. F. Rashid, and R. W. Dean, “Using Continuations to Implement Thread Management and Communication in Operating Systems”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1991), pages 122–136.
- [Eastlake 1999]** D. Eastlake, “Domain Name System Security Extensions”, *Network Working Group, Request for Comments: 2535* (1999).
- [Eisenberg and McGuire 1972]** M. A. Eisenberg and M. R. McGuire, “Further Comments on Dijkstra’s Concurrent Programming Control Problem”, *Communications of the ACM*, Volume 15, Number 11 (1972), page 999.
- [Ekanadham and Bernstein 1979]** K. Ekanadham and A. J. Bernstein, “Conditional Capabilities”, *IEEE Transactions on Software Engineering*, Volume SE-5, Number 5 (1979), pages 458–464.
- [Engelschall 2000]** R. Engelschall, “Portable Multithreading: The Signal Stack Trick For User-Space Thread Creation”, *Proceedings of the 2000 USENIX Annual Technical Conference* (2000).
- [Fang et al. 2001]** Z. Fang, L. Zhang, J. B. Carter, W. C. Hsieh, and S. A. McKee, “Reevaluating Online Superpage Promotion with Hardware Support”, *Proceedings of the International Symposium on High-Performance Computer Architecture*, Volume 50, Number 5 (2001).
- [Farrow 1986a]** R. Farrow, “Security for Superusers, or How to Break the UNIX System”, *UNIX World* (1986), pages 65–70.
- [Farrow 1986b]** R. Farrow, “Security Issues and Strategies for Users”, *UNIX World* (April 1986), pages 65–71.
- [Filipski and Hanko 1986]** A. Filipski and J. Hanko, “Making UNIX Secure”, *Byte* (April 1986), pages 113–128.
- [Fisher 1981]** J. A. Fisher, “Trace Scheduling: A Technique for Global Microcode Compaction”, *IEEE Transactions on Computers*, Volume 30, Number 7 (1981), pages 478–490.
- [Folk and Zoellick 1987]** M. J. Folk and B. Zoellick, *File Structures*, Addison-Wesley (1987).
- [Fortier 1989]** P. J. Fortier, *Handbook of LAN Technology*, McGraw-Hill (1989).
- [Freedman 1983]** D. H. Freedman, “Searching for Denser Disks”, *Infosystems* (1983), page 56.
- [Fujitani 1984]** L. Fujitani, “Laser Optical Disk: The Coming Revolution in On-Line Storage”, *Communications of the ACM*, Volume 27, Number 6 (1984), pages 546–554.
- [Gait 1988]** J. Gait, “The Optical File Cabinet: A Random-Access File System for Write-On Optical Disks”, *Computer*, Volume 21, Number 6 (1988).
- [Ganapathy and Schimmel 1998]** N. Ganapathy and C. Schimmel, “General Purpose Operating System Support for Multiple Page Sizes”, *Proceedings of the USENIX Technical Conference* (1998).

- [Ganger et al. 2002]** G. R. Ganger, D. R. Engler, M. F. Kaashoek, H. M. Briceno, R. Hunt, and T. Pinckney, “Fast and Flexible Application-Level Networking on Exokernel Systems”, *ACM Transactions on Computer Systems*, Volume 20, Number 1 (2002), pages 49–83.
- [Garfinkel et al. 2003]** S. Garfinkel, G. Spafford, and A. Schwartz, *Practical UNIX & Internet Security*, O'Reilly & Associates (2003).
- [Ghemawat et al. 2003]** S. Ghemawat, H. Gobioff, and S.-T. Leung, “The Google File System”, *Proceedings of the ACM Symposium on Operating Systems Principles* (2003).
- [Gibson et al. 1997a]** G. Gibson, D. Nagle, K. Amiri, F. Chang, H. Gobioff, E. Riedel, D. Rochberg, and J. Zelenka, “Filesystems for Network-Attached Secure Disks”, Technical report, Carnegie-Mellon University (1997).
- [Gibson et al. 1997b]** G. A. Gibson, D. Nagle, K. Amiri, F. W. Chang, E. M. Feinberg, H. Gobioff, C. Lee, B. Ozceri, E. Riedel, D. Rochberg, and J. Zelenka, “File Server Scaling with Network-Attached Secure Disks”, *Measurement and Modeling of Computer Systems* (1997), pages 272–284.
- [Gifford 1982]** D. K. Gifford, “Cryptographic Sealing for Information Secrecy and Authentication”, *Communications of the ACM*, Volume 25, Number 4 (1982), pages 274–286.
- [Goetz et al. 2006]** B. Goetz, T. Peirls, J. Bloch, J. Bowbeer, D. Holmes, and D. Lea, *Java Concurrency in Practice*, Addison-Wesley (2006).
- [Goldberg et al. 1996]** I. Goldberg, D. Wagner, R. Thomas, and E. A. Brewer, “A Secure Environment for Untrusted Helper Applications”, *Proceedings of the 6th Usenix Security Symposium* (1996).
- [Golden and Pechura 1986]** D. Golden and M. Pechura, “The Structure of Microcomputer File Systems”, *Communications of the ACM*, Volume 29, Number 3 (1986), pages 222–230.
- [Golding et al. 1995]** R. A. Golding, P. B. II, C. Staelin, T. Sullivan, and J. Wilkes, “Idleness is Not Sloth”, *USENIX Winter* (1995), pages 201–212.
- [Golm et al. 2002]** M. Golm, M. Felser, C. Wawersich, and J. Kleinoder, “The JX Operating System”, *2002 USENIX Annual Technical Conference* (2002).
- [Gong 2002]** L. Gong, “Peer-to-Peer Networks in Action”, *IEEE Internet Computing*, Volume 6, Number 1 (2002).
- [Gong et al. 1997]** L. Gong, M. Mueller, H. Prafullchandra, and R. Schemers, “Going Beyond the Sandbox: An Overview of the New Security Architecture in the Java Development Kit 1.2”, *Proceedings of the USENIX Symposium on Internet Technologies and Systems* (1997).
- [Goodman et al. 1989]** J. R. Goodman, M. K. Vernon, and P. J. Woest, “Efficient Synchronization Primitives for Large-Scale Cache-Coherent Multiprocessors”, *Proceedings of the International Conference on Architectural Support for Programming Languages and Operating Systems* (1989), pages 64–75.

- [**Gosling et al. 1996**] J. Gosling, B. Joy, and G. Steele, *The Java Language Specification*, Addison-Wesley (1996).
- [**Govindan and Anderson 1991**] R. Govindan and D. P. Anderson, “Scheduling and IPC Mechanisms for Continuous Media”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1991), pages 68–80.
- [**Grampp and Morris 1984**] F. T. Grampp and R. H. Morris, “UNIX Operating-System Security”, *AT&T Bell Laboratories Technical Journal*, Volume 63, Number 8 (1984), pages 1649–1672.
- [**Gray 1997**] J. Gray, *Interprocess Communications in UNIX*, Prentice Hall (1997).
- [**Greenawalt 1994**] P. Greenawalt, “Modeling Power Management for Hard Disks”, *Proceedings of the Symposium on Modeling and Simulation of Computer Telecommunication Systems* (1994), pages 62–66.
- [**Grosshans 1986**] D. Grosshans, *File Systems Design and Implementation*, Prentice Hall (1986).
- [**Hall et al. 1996**] L. Hall, D. Shmoys, and J. Wein, “Scheduling To Minimize Average Completion Time: Off-line and On-line Algorithms”, *SODA: ACM-SIAM Symposium on Discrete Algorithms* (1996).
- [**Hamacher et al. 2002**] C. Hamacher, Z. Vranesic, and S. Zaky, *Computer Organization, Fifth Edition*, McGraw-Hill (2002).
- [**Harker et al. 1981**] J. M. Harker, D. W. Brede, R. E. Pattison, G. R. Santana, and L. G. Taft, “A Quarter Century of Disk File Innovation”, *IBM Journal of Research and Development*, Volume 25, Number 5 (1981), pages 677–689.
- [**Harold 2005**] E. R. Harold, *Java Network Programming, Third Edition*, O'Reilly & Associates (2005).
- [**Harrison et al. 1976**] M. A. Harrison, W. L. Ruzzo, and J. D. Ullman, “Protection in Operating Systems”, *Communications of the ACM*, Volume 19, Number 8 (1976), pages 461–471.
- [**Hart 2005**] J. M. Hart, *Windows System Programming, Third Edition*, Addison-Wesley (2005).
- [**Hartman and Ousterhout 1995**] J. H. Hartman and J. K. Ousterhout, “The Zebra Striped Network File System”, *ACM Transactions on Computer Systems*, Volume 13, Number 3 (1995), pages 274–310.
- [**Hecht et al. 1988**] M. S. Hecht, A. Johri, R. Aditham, and T. J. Wei, “Experience Adding C2 Security Features to UNIX”, *Proceedings of the Summer USENIX Conference* (1988), pages 133–146.
- [**Hennessy and Patterson 2002**] J. L. Hennessy and D. A. Patterson, *Computer Architecture: A Quantitative Approach, Third Edition*, Morgan Kaufmann Publishers (2002).
- [**Hennessy and Patterson 2007**] J. Hennessy and D. Patterson, *Computer Architecture: A Quantitative Approach, Fourth Edition*, Morgan Kaufmann (2007).

- [**Henry 1984**] G. Henry, “The Fair Share Scheduler”, *AT&T Bell Laboratories Technical Journal* (1984).
- [**Herlihy 1993**] M. Herlihy, “A Methodology for Implementing Highly Concurrent Data Objects”, *ACM Transactions on Programming Languages and Systems*, Volume 15, Number 5 (1993), pages 745–770.
- [**Herlihy and Moss 1993**] M. Herlihy and J. E. B. Moss, “Transactional Memory: Architectural Support For Lock-Free Data Structures”, *Proceedings of the Twentieth Annual International Symposium on Computer Architecture* (1993).
- [**Hitz et al. 1995**] D. Hitz, J. Lau, and M. Malcolm, “File System Design for an NFS File Server Appliance”, Technical report, NetApp (http://www.netapp.com/tech_library/3002.html) (1995).
- [**Hoagland 1985**] A. S. Hoagland, “Information Storage Technology—A Look at the Future”, *Computer*, Volume 18, Number 7 (1985), pages 60–68.
- [**Hoare 1972**] C. A. R. Hoare, “Towards a Theory of Parallel Programming”, in [**Hoare and Perrott 1972**] (1972), pages 61–71.
- [**Hoare 1974**] C. A. R. Hoare, “Monitors: An Operating System Structuring Concept”, *Communications of the ACM*, Volume 17, Number 10 (1974), pages 549–557.
- [**Holub 2000**] A. Holub, *Taming Java Threads*, Apress (2000).
- [**Howarth et al. 1961**] D. J. Howarth, R. B. Payne, and F. H. Sumner, “The Manchester University Atlas Operating System, Part II: User’s Description”, *Computer Journal*, Volume 4, Number 3 (1961), pages 226–229.
- [**Hsiao et al. 1979**] D. K. Hsiao, D. S. Kerr, and S. E. Madnick, *Computer Security*, Academic Press (1979).
- [**Hu and Perrig 2004**] Y.-C. Hu and A. Perrig, “SPV: A Secure Path Vector Routing Scheme for Securing BGP”, *Proceedings of ACM SIGCOMM Conference on Data Communication* (2004).
- [**Hu et al. 2002**] Y.-C. Hu, A. Perrig, and D. Johnson, “Ariadne: A Secure On-Demand Routing Protocol for Ad Hoc Networks”, *Proceedings of the Annual International Conference on Mobile Computing and Networking* (2002).
- [**Iacobucci 1988**] E. Iacobucci, *OS/2 Programmer’s Guide*, Osborne McGraw-Hill (1988).
- [**IBM 1983**] *Technical Reference*. IBM Corporation (1983).
- [**Iliffe and Jodeit 1962**] J. K. Iliffe and J. G. Jodeit, “A Dynamic Storage Allocation System”, *Computer Journal*, Volume 5, Number 3 (1962), pages 200–209.
- [**Intel 1985a**] *iAPX 286 Programmer’s Reference Manual*. Intel Corporation (1985).
- [**Intel 1985b**] *iAPX 86/88, 186/188 User’s Manual Programmer’s Reference*. Intel Corporation (1985).
- [**Intel 1986**] *iAPX 386 Programmer’s Reference Manual*. Intel Corporation (1986).

- [Intel 1990] *i486 Microprocessor Programmer's Reference Manual*. Intel Corporation (1990).
- [Intel 1993] *Pentium Processor User's Manual, Volume 3: Architecture and Programming Manual*. Intel Corporation (1993).
- [Iseminger 2000] D. Iseminger, *Active Directory Services for Microsoft Windows 2000. Technical Reference*, Microsoft Press (2000).
- [Jacob and Mudge 1997] B. Jacob and T. Mudge, "Software-Managed Address Translation", *Proceedings of the International Symposium on High Performance Computer Architecture and Implementation* (1997).
- [Jacob and Mudge 1998a] B. Jacob and T. Mudge, "Virtual Memory in Contemporary Microprocessors", *IEEE Micro Magazine*, Volume 18, (1998), pages 60–75.
- [Jacob and Mudge 1998b] B. Jacob and T. Mudge, "Virtual Memory: Issues of Implementation", *IEEE Computer Magazine*, Volume 31, Number 6 (1998), pages 33–43.
- [Jacob and Mudge 2001] B. Jacob and T. Mudge, "Uniprocessor Virtual Memory Without TLBs", *IEEE Transactions on Computers*, Volume 50, Number 5 (2001).
- [Jacobson and Wilkes 1991] D. M. Jacobson and J. Wilkes, "Disk Scheduling Algorithms Based on Rotational Position", Technical report, Hewlett-Packard Laboratories (1991).
- [Johnstone and Wilson 1998] M. S. Johnstone and P. R. Wilson, "The Memory Fragmentation Problem: Solved?", *Proceedings of the First International Symposium on Memory Management* (1998), pages 26–36.
- [Jones and Liskov 1978] A. K. Jones and B. H. Liskov, "A Language Extension for Expressing Constraints on Data Access", *Communications of the ACM*, Volume 21, Number 5 (1978), pages 358–367.
- [Kaashoek et al. 1997] M. F. Kaashoek, D. R. Engler, G. R. Ganger, H. M. Briceno, R. Hunt, D. Mazieres, T. Pinckney, R. Grimm, J. Jannotti, and K. Mackenzie, "Application Performance and Flexibility on Exokernel Systems", *Proceedings of the ACM Symposium on Operating Systems Principles* (1997), pages 52–65.
- [Katz et al. 1989] R. H. Katz, G. A. Gibson, and D. A. Patterson, "Disk System Architectures for High Performance Computing", *Proceedings of the IEEE* (1989).
- [Kay and Lauder 1988] J. Kay and P. Lauder, "A Fair Share Scheduler", *Communications of the ACM*, Volume 31, Number 1 (1988), pages 44–55.
- [Kent et al. 2000] S. Kent, C. Lynn, and K. Seo, "Secure Border Gateway Protocol (Secure-BGP)", *IEEE Journal on Selected Areas in Communications*, Volume 18, Number 4 (2000), pages 582–592.
- [Kenville 1982] R. F. Kenville, "Optical Disk Data Storage", *Computer*, Volume 15, Number 7 (1982), pages 21–26.
- [Kessels 1977] J. L. W. Kessels, "An Alternative to Event Queues for Synchronization in Monitors", *Communications of the ACM*, Volume 20, Number 7 (1977), pages 500–503.

- [**Kilburn et al. 1961**] T. Kilburn, D. J. Howarth, R. B. Payne, and F. H. Sumner, “The Manchester University Atlas Operating System, Part I: Internal Organization”, *Computer Journal*, Volume 4, Number 3 (1961), pages 222–225.
- [**King 1990**] R. P. King, “Disk Arm Movement in Anticipation of Future Requests”, *ACM Transactions on Computer Systems*, Volume 8, Number 3 (1990), pages 214–229.
- [**Kleinrock 1975**] L. Kleinrock, *Queueing Systems, Volume II: Computer Applications*, Wiley-Interscience (1975).
- [**Knowlton 1965**] K. C. Knowlton, “A Fast Storage Allocator”, *Communications of the ACM*, Volume 8, Number 10 (1965), pages 623–624.
- [**Knuth 1966**] D. E. Knuth, “Additional Comments on a Problem in Concurrent Programming Control”, *Communications of the ACM*, Volume 9, Number 5 (1966), pages 321–322.
- [**Knuth 1973**] D. E. Knuth, *The Art of Computer Programming, Volume 1: Fundamental Algorithms*, Second Edition, Addison-Wesley (1973).
- [**Knuth 1998**] D. E. Knuth, *The Art of Computer Programming, Volume 3: Sorting and Searching*, Second Edition, Addison-Wesley (1998).
- [**Koch 1987**] P. D. L. Koch, “Disk File Allocation Based on the Buddy System”, *ACM Transactions on Computer Systems*, Volume 5, Number 4 (1987), pages 352–370.
- [**Kongetira et al. 2005**] P. Kongetira, K. Aingaran, and K. Olukotun, “Niagara: A 32-Way Multithreaded SPARC Processor”, *IEEE Micro Magazine*, Volume 25, Number 2 (2005), pages 21–29.
- [**Kopetz and Reisinger 1993**] H. Kopetz and J. Reisinger, “The Non-Blocking Write Protocol NBW: A Solution to a Real-Time Synchronisation Problem”, *IEEE Real-Time Systems Symposium* (1993), pages 131–137.
- [**Kosaraju 1973**] S. Kosaraju, “Limitations of Dijkstra’s Semaphore Primitives and Petri Nets”, *Operating Systems Review*, Volume 7, Number 4 (1973), pages 122–126.
- [**Kozierok 2005**] C. Kozierok, *The TCP/IP Guide*, No Starch Press (2005).
- [**Kramer 1988**] S. M. Kramer, “Retaining SUID Programs in a Secure UNIX”, *Proceedings of the Summer USENIX Conference* (1988), pages 107–118.
- [**Kurose and Ross 2005**] J. Kurose and K. Ross, *Computer Networking—A Top-Down Approach Featuring the Internet*, Third Edition, Addison-Wesley (2005).
- [**Lamport 1974**] L. Lamport, “A New Solution of Dijkstra’s Concurrent Programming Problem”, *Communications of the ACM*, Volume 17, Number 8 (1974), pages 453–455.
- [**Lamport 1976**] L. Lamport, “Synchronization of Independent Processes”, *Acta Informatica*, Volume 7, Number 1 (1976), pages 15–34.
- [**Lamport 1977**] L. Lamport, “Concurrent Reading and Writing”, *Communications of the ACM*, Volume 20, Number 11 (1977), pages 806–811.

- [Lamport 1981]** L. Lamport, “Password Authentication with Insecure Communications”, *Communications of the ACM*, Volume 24, Number 11 (1981), pages 770–772.
- [Lamport 1986]** L. Lamport, “The Mutual Exclusion Problem”, *Communications of the ACM*, Volume 33, Number 2 (1986), pages 313–348.
- [Lamport 1987]** L. Lamport, “A Fast Mutual Exclusion Algorithm”, *ACM Transactions on Computer Systems*, Volume 5, Number 1 (1987), pages 1–11.
- [Lamport 1991]** L. Lamport, “The Mutual Exclusion Problem Has Been Solved”, *Communications of the ACM*, Volume 34, Number 1 (1991), page 110.
- [Lampson 1969]** B. W. Lampson, “Dynamic Protection Structures”, *Proceedings of the AFIPS Fall Joint Computer Conference* (1969), pages 27–38.
- [Lampson 1971]** B. W. Lampson, “Protection”, *Proceedings of the Fifth Annual Princeton Conference on Information Systems Science* (1971), pages 437–443.
- [Lampson 1973]** B. W. Lampson, “A Note on the Confinement Problem”, *Communications of the ACM*, Volume 10, Number 16 (1973), pages 613–615.
- [Lampson and Redell 1979]** B. W. Lampson and D. D. Redell, “Experience with Processes and Monitors in Mesa”, *Proceedings of the 7th ACM Symposium on Operating Systems Principles (SOSP)* (1979), pages 43–44.
- [Landwehr 1981]** C. E. Landwehr, “Formal Models of Computer Security”, *Computing Surveys*, Volume 13, Number 3 (1981), pages 247–278.
- [Larson and Kajla 1984]** P. Larson and A. Kajla, “File Organization: Implementation of a Method Guaranteeing Retrieval in One Access”, *Communications of the ACM*, Volume 27, Number 7 (1984), pages 670–677.
- [Lee 2003]** J. Lee, “An End-User Perspective on File-Sharing Systems”, *Communications of the ACM*, Volume 46, Number 2 (2003), pages 49–53.
- [Lee and Thekkath 1996]** E. K. Lee and C. A. Thekkath, “Petal: Distributed Virtual Disks”, *Proceedings of the Seventh International Conference on Architectural Support for Programming Languages and Operating Systems* (1996), pages 84–92.
- [Leffler et al. 1989]** S. J. Leffler, M. K. McKusick, M. J. Karels, and J. S. Quarterman, *The Design and Implementation of the 4.3BSD UNIX Operating System*, Addison-Wesley (1989).
- [Lehmann 1987]** F. Lehmann, “Computer Break-Ins”, *Communications of the ACM*, Volume 30, Number 7 (1987), pages 584–585.
- [Lempel 1979]** A. Lempel, “Cryptology in Transition”, *Computing Surveys*, Volume 11, Number 4 (1979), pages 286–303.
- [Levin et al. 1975]** R. Levin, E. S. Cohen, W. M. Corwin, F. J. Pollack, and W. A. Wulf, “Policy/Mechanism Separation in Hydra”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1975), pages 132–140.
- [Levine 2003]** G. Levine, “Defining Deadlock”, *Operating Systems Review*, Volume 37, Number 1 (2003).

- [Levy 1994] S. Levy, *Hackers*, Penguin Books (1994).
- [Lewis and Berg 1998] B. Lewis and D. Berg, *Multithreaded Programming with Pthreads*, Sun Microsystems Press (1998).
- [Lewis and Berg 2000] B. Lewis and D. Berg, *Multithreaded Programming with Java Technology*, Sun Microsystems Press (2000).
- [Lindholm and Yellin 1999] T. Lindholm and F. Yellin, *The Java Virtual Machine Specification, Second Edition*, Addison-Wesley (1999).
- [Ling et al. 2000] Y. Ling, T. Mullen, and X. Lin, “Analysis of Optimal Thread Pool Size”, *Operating System Review*, Volume 34, Number 2 (2000).
- [Lipner 1975] S. Lipner, “A Comment on the Confinement Problem”, *Operating System Review*, Volume 9, Number 5 (1975), pages 192–196.
- [Lipton 1974] R. Lipton, *On Synchronization Primitive Systems*. PhD thesis, Carnegie-Mellon University (1974).
- [Lobel 1986] J. Lobel, *Foilng the System Breakers: Computer Security and Access Control*, McGraw-Hill (1986).
- [Loo 2003] A. W. Loo, “The Future of Peer-to-Peer Computing”, *Communications of the ACM*, Volume 46, Number 9 (2003), pages 56–61.
- [Love 2004] R. Love, *Linux Kernel Development*, Developer’s Library (2004).
- [Love 2005] R. Love, *Linux Kernel Development, Second Edition*, Developer’s Library (2005).
- [Lowney et al. 1993] P. G. Lowney, S. M. Freudenberger, T. J. Karzes, W. D. Lichtenstein, R. P. Nix, J. S. O’Donnell, and J. C. Ruttenberg, “The Multiflow Trace Scheduling Compiler”, *Journal of Supercomputing*, Volume 7, Number 1-2 (1993), pages 51–142.
- [Ludwig 1998] M. Ludwig, *The Giant Black Book of Computer Viruses, Second Edition*, American Eagle Publications (1998).
- [Ludwig 2002] M. Ludwig, *The Little Black Book of Email Viruses*, American Eagle Publications (2002).
- [Lumb et al. 2000] C. Lumb, J. Schindler, G. R. Ganger, D. F. Nagle, and E. Riedel, “Towards Higher Disk Head Utilization: Extracting Free Bandwidth From Busy Disk Drives”, *Symposium on Operating Systems Design and Implementation* (2000).
- [Maher et al. 1994] C. Maher, J. S. Goldick, C. Kerby, and B. Zumach, “The Integration of Distributed File Systems and Mass Storage Systems”, *Proceedings of the IEEE Symposium on Mass Storage Systems* (1994), pages 27–31.
- [Marsh et al. 1991] B. D. Marsh, M. L. Scott, T. J. LeBlanc, and E. P. Markatos, “First-Class User-Level Threads”, *Proceedings of the 13th ACM Symposium on Operating Systems Principle* (1991), pages 110–121.
- [Mattson et al. 1970] R. L. Mattson, J. Gecsei, D. R. Slutz, and I. L. Traiger, “Evaluation Techniques for Storage Hierarchies”, *IBM Systems Journal*, Volume 9, Number 2 (1970), pages 78–117.

- [**Mauro and McDougall 2007**] J. Mauro and R. McDougall, *Solaris Internals: Core Kernel Architecture*, Prentice Hall (2007).
- [**McCanne and Jacobson 1993**] S. McCanne and V. Jacobson, “The BSD Packet Filter: A New Architecture for User-level Packet Capture”, *USENIX Winter* (1993), pages 259–270.
- [**McDougall and Laudon 2006**] R. McDougall and J. Laudon, “Multi-Core Processors are Here”, *USENIX ;login: The USENIX Magazine*, Volume 31, Number 5 (2006), pages 32–39.
- [**McDougall and Mauro 2007**] R. McDougall and J. Mauro, *Solaris Internals, Second Edition*, Prentice Hall (2007).
- [**McKeon 1985**] B. McKeon, “An Algorithm for Disk Caching with Limited Memory”, *Byte*, Volume 10, Number 9 (1985), pages 129–138.
- [**McKusick and Neville-Neil 2005**] M. K. McKusick and G. V. Neville-Neil, *The Design and Implementation of the FreeBSD UNIX Operating System*, Addison Wesley (2005).
- [**McKusick et al. 1984**] M. K. McKusick, W. N. Joy, S. J. Leffler, and R. S. Fabry, “A Fast File System for UNIX”, *ACM Transactions on Computer Systems*, Volume 2, Number 3 (1984), pages 181–197.
- [**McKusick et al. 1996**] M. K. McKusick, K. Bostic, and M. J. Karels, *The Design and Implementation of the 4.4 BSD UNIX Operating System*, John Wiley and Sons (1996).
- [**McNairy and Bhatia 2005**] C. McNairy and R. Bhatia, “Montecito: A Dual-Core, Dual-Threaded Itanium Processor”, *IEEE Micro Magazine*, Volume 25, Number 2 (2005), pages 10–20.
- [**McVoy and Kleiman 1991**] L. W. McVoy and S. R. Kleiman, “Extent-like Performance from a UNIX File System”, *Proceedings of the Winter USENIX Conference* (1991), pages 33–44.
- [**Mellor-Crummey and Scott 1991**] J. M. Mellor-Crummey and M. L. Scott, “Algorithms for Scalable Synchronization on Shared-Memory Multiprocessors”, *ACM Transactions on Computer Systems*, Volume 9, Number 1 (1991), pages 21–65.
- [**Microsoft 1986**] *Microsoft MS-DOS User’s Reference and Microsoft MS-DOS Programmer’s Reference*. Microsoft Press (1986).
- [**Microsoft 1996**] *Microsoft Windows NT Workstation Resource Kit*. Microsoft Press (1996).
- [**Milenkovic 1987**] M. Milenkovic, *Operating Systems: Concepts and Design*, McGraw-Hill (1987).
- [**Miller and Katz 1993**] E. L. Miller and R. H. Katz, “An Analysis of File Migration in a UNIX Supercomputing Environment”, *Proceedings of the Winter USENIX Conference* (1993), pages 421–434.
- [**Mockapetris 1987**] P. Mockapetris, “Domain Names—Concepts and Facilities”, *Network Working Group, Request for Comments: 1034* (1987).

- [Morris and Thompson 1979]** R. Morris and K. Thompson, “Password Security: A Case History”, *Communications of the ACM*, Volume 22, Number 11 (1979), pages 594–597.
- [Morshedian 1986]** D. Morshedian, “How to Fight Password Pirates”, *Computer*, Volume 19, Number 1 (1986).
- [Motorola 1993]** *PowerPC 601 RISC Microprocessor User’s Manual*. Motorola Inc. (1993).
- [Mullender 1993]** S. Mullender, *Distributed Systems, Third Edition*, Addison-Wesley (1993).
- [Myers and Beigl 2003]** B. Myers and M. Beigl, “Handheld Computing”, *Computer*, Volume 36, Number 9 (2003), pages 27–29.
- [Navarro et al. 2002]** J. Navarro, S. Lyer, P. Druschel, and A. Cox, “Practical, Transparent Operating System Support for Superpages”, *Proceedings of the USENIX Symposium on Operating Systems Design and Implementation* (2002).
- [Needham and Walker 1977]** R. M. Needham and R. D. H. Walker, “The Cambridge CAP Computer and Its Protection System”, *Proceedings of the Sixth Symposium on Operating System Principles* (1977), pages 1–10.
- [Nelson et al. 1988]** M. Nelson, B. Welch, and J. K. Ousterhout, “Caching in the Sprite Network File System”, *ACM Transactions on Computer Systems*, Volume 6, Number 1 (1988), pages 134–154.
- [Norton and Wilton 1988]** P. Norton and R. Wilton, *The New Peter Norton Programmer’s Guide to the IBM PC & PS/2*, Microsoft Press (1988).
- [Nutt 2004]** G. Nutt, *Operating Systems: A Modern Perspective, Third Edition*, Addison-Wesley (2004).
- [Oaks and Wong 1999]** S. Oaks and H. Wong, *Java Threads, Second Edition*, O’Reilly & Associates (1999).
- [O’Leary and Kitts 1985]** B. T. O’Leary and D. L. Kitts, “Optical Device for a Mass Storage System”, *Computer*, Volume 18, Number 7 (1985).
- [Olsen and Kenley 1989]** R. P. Olsen and G. Kenley, “Virtual Optical Disks Solve the On-Line Storage Crunch”, *Computer Design*, Volume 28, Number 1 (1989), pages 93–96.
- [Organick 1972]** E. I. Organick, *The Multics System: An Examination of Its Structure*, MIT Press (1972).
- [Ortiz 2001]** S. Ortiz, “Embedded OSs Gain the Inside Track”, *Computer*, Volume 34, Number 11 (2001).
- [Ousterhout 1991]** J. Ousterhout. “The Role of Distributed State”. In CMU Computer Science: a 25th Anniversary Commemorative (1991), R. F. Rashid, Ed., Addison-Wesley (1991).
- [Ousterhout et al. 1985]** J. K. Ousterhout, H. D. Costa, D. Harrison, J. A. Kunze, M. Kupfer, and J. G. Thompson, “A Trace-Driven Analysis of the UNIX 4.2 BSD File System”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1985), pages 15–24.

- [Parameswaran et al. 2001]** M. Parameswaran, A. Susarla, and A. B. Whinston, “P2P Networking: An Information-Sharing Alternative”, *Computer*, Volume 34, Number 7 (2001).
- [Parnas 1975]** D. L. Parnas, “On a Solution to the Cigarette Smokers’ Problem Without Conditional Statements”, *Communications of the ACM*, Volume 18, Number 3 (1975), pages 181–183.
- [Patil 1971]** S. Patil, “Limitations and Capabilities of Dijkstra’s Semaphore Primitives for Coordination Among Processes”, Technical report, Massachusetts Institute of Technology (1971).
- [Patterson et al. 1988]** D. A. Patterson, G. Gibson, and R. H. Katz, “A Case for Redundant Arrays of Inexpensive Disks (RAID)”, *Proceedings of the ACM SIGMOD International Conference on the Management of Data* (1988).
- [Pechura and Schoeffler 1983]** M. A. Pechura and J. D. Schoeffler, “Estimating File Access Time of Floppy Disks”, *Communications of the ACM*, Volume 26, Number 10 (1983), pages 754–763.
- [Perlman 1988]** R. Perlman, *Network Layer Protocols with Byzantine Robustness*. PhD thesis, Massachusetts Institute of Technology (1988).
- [Peterson 1981]** G. L. Peterson, “Myths About the Mutual Exclusion Problem”, *Information Processing Letters*, Volume 12, Number 3 (1981).
- [Peterson and Norman 1977]** J. L. Peterson and T. A. Norman, “Buddy Systems”, *Communications of the ACM*, Volume 20, Number 6 (1977), pages 421–431.
- [Pfleeger and Pfleeger 2003]** C. Pfleeger and S. Pfleeger, *Security in Computing, Third Edition*, Prentice Hall (2003).
- [Philbin et al. 1996]** J. Philbin, J. Edler, O. J. Anshus, C. C. Douglas, and K. Li, “Thread Scheduling for Cache Locality”, *Architectural Support for Programming Languages and Operating Systems* (1996), pages 60–71.
- [Pinilla and Gill 2003]** R. Pinilla and M. Gill, “JVM: Platform Independent vs. Performance Dependent”, *Operating System Review* (2003).
- [Popek 1974]** G. J. Popek, “Protection Structures”, *Computer*, Volume 7, Number 6 (1974), pages 22–33.
- [Prieve and Fabry 1976]** B. G. Prieve and R. S. Fabry, “VMIN—An Optimal Variable Space Page-Replacement Algorithm”, *Communications of the ACM*, Volume 19, Number 5 (1976), pages 295–297.
- [Psaltis and Mok 1995]** D. Psaltis and F. Mok, “Holographic Memories”, *Scientific American*, Volume 273, Number 5 (1995), pages 70–76.
- [Purdom, Jr. and Stigler 1970]** P. W. Purdom, Jr. and S. M. Stigler, “Statistical Properties of the Buddy System”, *J. ACM*, Volume 17, Number 4 (1970), pages 683–697.
- [Quinlan 1991]** S. Quinlan, “A Cached WORM”, *Software—Practice and Experience*, Volume 21, Number 12 (1991), pages 1289–1299.
- [Rago 1993]** S. Rago, *UNIX System V Network Programming*, Addison-Wesley (1993).

- [Raymond 1999] E. S. Raymond, *The Cathedral & the Bazaar*, O'Reilly & Associates (1999).
- [Raynal 1986] M. Raynal, *Algorithms for Mutual Exclusion*, MIT Press (1986).
- [Redell and Fabry 1974] D. D. Redell and R. S. Fabry, “Selective Revocation of Capabilities”, *Proceedings of the IRIA International Workshop on Protection in Operating Systems* (1974), pages 197–210.
- [Redell et al. 1980] D. D. Redell, Y. K. Dalal, T. R. Horsley, H. C. Lauer, W. C. Lynch, P. R. McJones, H. G. Murray, and S. P. Purcell, “Pilot: An Operating System for a Personal Computer”, *Communications of the ACM*, Volume 23, Number 2 (1980), pages 81–92.
- [Reid 1987] B. Reid, “Reflections on Some Recent Widespread Computer Break-Ins”, *Communications of the ACM*, Volume 30, Number 2 (1987), pages 103–105.
- [Richards 1990] A. E. Richards, “A File System Approach for Integrating Removable Media Devices and Jukeboxes”, *Optical Information Systems*, Volume 10, Number 5 (1990), pages 270–274.
- [Richter 1997] J. Richter, *Advanced Windows*, Microsoft Press (1997).
- [Riedel et al. 1998] E. Riedel, G. A. Gibson, and C. Faloutsos, “Active Storage for Large-Scale Data Mining and Multimedia”, *Proceedings of 24th International Conference on Very Large Data Bases* (1998), pages 62–73.
- [Ripeanu et al. 2002] M. Ripeanu, A. Imnitchi, and I. Foster, “Mapping the Gnutella Network”, *IEEE Internet Computing*, Volume 6, Number 1 (2002).
- [Rivest et al. 1978] R. L. Rivest, A. Shamir, and L. Adleman, “On Digital Signatures and Public Key Cryptosystems”, *Communications of the ACM*, Volume 21, Number 2 (1978), pages 120–126.
- [Roberson 2003] J. Roberson, “ULE: A Modern Scheduler For FreeBSD”, *Proceedings of the USENIX BSDCon Conference* (2003).
- [Rosenblum and Ousterhout 1991] M. Rosenblum and J. K. Ousterhout, “The Design and Implementation of a Log-Structured File System”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1991), pages 1–15.
- [Ruemmler and Wilkes 1991] C. Ruemmler and J. Wilkes, “Disk Shuffling”, Technical report (1991).
- [Ruemmler and Wilkes 1993] C. Ruemmler and J. Wilkes, “Unix Disk Access Patterns”, *Proceedings of the Winter USENIX Conference* (1993), pages 405–420.
- [Ruemmler and Wilkes 1994] C. Ruemmler and J. Wilkes, “An Introduction to Disk Drive Modeling”, *Computer*, Volume 27, Number 3 (1994), pages 17–29.
- [Rushby 1981] J. M. Rushby, “Design and Verification of Secure Systems”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1981), pages 12–21.
- [Rushby and Randell 1983] J. Rushby and B. Randell, “A Distributed Secure System”, *Computer*, Volume 16, Number 7 (1983), pages 55–67.

- [Russell and Gangemi 1991] D. Russell and G. T. Gangemi, *Computer Security Basics*, O'Reilly & Associates (1991).
- [Russinovich and Solomon 2009] M. E. Russinovich and D. A. Solomon, *Windows Internals: Including Windows Server 2008 and Windows Vista, Fifth Edition, Fifth Edition*, Microsoft Press (2009).
- [Saltzer and Schroeder 1975] J. H. Saltzer and M. D. Schroeder, “The Protection of Information in Computer Systems”, *Proceedings of the IEEE* (1975), pages 1278–1308.
- [Sandberg 1987] R. Sandberg, *The Sun Network File System: Design, Implementation and Experience*, Sun Microsystems (1987).
- [Sandberg et al. 1985] R. Sandberg, D. Goldberg, S. Kleiman, D. Walsh, and B. Lyon, “Design and Implementation of the Sun Network Filesystem”, *Proceedings of the Summer USENIX Conference* (1985), pages 119–130.
- [Sargent and Shoemaker 1995] M. Sargent and R. Shoemaker, *The Personal Computer from the Inside Out, Third Edition*, Addison-Wesley (1995).
- [Sarisky 1983] L. Sarisky, “Will Removable Hard Disks Replace the Floppy?”, *Byte* (1983), pages 110–117.
- [Savage et al. 2000] S. Savage, D. Wetherall, A. R. Karlin, and T. Anderson, “Practical Network Support for IP Traceback”, *Proceedings of ACM SIGCOMM Conference on Data Communication* (2000), pages 295–306.
- [Schell 1983] R. R. Schell, “A Security Kernel for a Multiprocessor Microcomputer”, *Computer* (1983), pages 47–53.
- [Schindler and Gregory 1999] J. Schindler and G. Gregory, “Automated Disk Drive Characterization”, Technical report (1999).
- [Schlichting and Schneider 1982] R. D. Schlichting and F. B. Schneider, “Understanding and Using Asynchronous Message Passing Primitives”, *Proceedings of the Symposium on Principles of Distributed Computing* (1982), pages 141–147.
- [Schneier 1996] B. Schneier, *Applied Cryptography, Second Edition*, John Wiley and Sons (1996).
- [Schrage 1967] L. E. Schrage, “The Queue M/G/1 with Feedback to Lower Priority Queues”, *Management Science*, Volume 13, (1967), pages 466–474.
- [Seely 1989] D. Seely, “Password Cracking: A Game of Wits”, *Communications of the ACM*, Volume 32, Number 6 (1989), pages 700–704.
- [Seltzer et al. 1990] M. Seltzer, P. Chen, and J. Ousterhout, “Disk Scheduling Revisited”, *Proceedings of the Winter USENIX Conference* (1990), pages 313–323.
- [Seltzer et al. 1993] M. I. Seltzer, K. Bostic, M. K. McKusick, and C. Staelin, “An Implementation of a Log-Structured File System for UNIX”, *USENIX Winter* (1993), pages 307–326.
- [Seltzer et al. 1995] M. I. Seltzer, K. A. Smith, H. Balakrishnan, J. Chang, S. McMains, and V. N. Padmanabhan, “File System Logging Versus Clustering: A Performance Comparison”, *USENIX Winter* (1995), pages 249–264.

- [Shrivastava and Panzieri 1982]** S. K. Shrivastava and F. Panzieri, “The Design of a Reliable Remote Procedure Call Mechanism”, *IEEE Transactions on Computers*, Volume C-31, Number 7 (1982), pages 692–697.
- [Siddha et al. 2007]** S. Siddha, V. Pallipadi, and A. Mallick, “Process Scheduling Challenges in the Era of Multi-Core Processors”, *Intel Technology Journal*, Volume 11, (2007).
- [Silberschatz et al. 2010]** A. Silberschatz, H. F. Korth, and S. Sudarshan, *Database System Concepts, Sixth Edition*, McGraw-Hill (2010).
- [Silverman 1983]** J. M. Silverman, “Reflections on the Verification of the Security of an Operating System Kernel”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1983), pages 143–154.
- [Silvers 2000]** C. Silvers, “UBC: An Efficient Unified I/O and Memory Caching Subsystem for NetBSD”, *USENIX Annual Technical Conference—FREENIX Track* (2000).
- [Simmons 1979]** G. J. Simmons, “Symmetric and Asymmetric Encryption”, *Computing Surveys*, Volume 11, Number 4 (1979), pages 304–330.
- [Sincerbox 1994]** G. T. Sincerbox, editor, *Selected Papers on Holographic Storage*, Optical Engineering Press (1994).
- [Singh 2007]** A. Singh, *Mac OS X Internals : A Systems Approach*, Addison-Wesley (2007).
- [Smith 1982]** A. J. Smith, “Cache Memories”, *ACM Computing Surveys*, Volume 14, Number 3 (1982), pages 473–530.
- [Smith 1985]** A. J. Smith, “Disk Cache-Miss Ratio Analysis and Design Considerations”, *ACM Transactions on Computer Systems*, Volume 3, Number 3 (1985), pages 161–203.
- [Solomon 1998]** D. A. Solomon, *Inside Windows NT, Second Edition*, Microsoft Press (1998).
- [Solomon and Russinovich 2000]** D. A. Solomon and M. E. Russinovich, *Inside Microsoft Windows 2000, Third Edition*, Microsoft Press (2000).
- [Spafford 1989]** E. H. Spafford, “The Internet Worm: Crisis and Aftermath”, *Communications of the ACM*, Volume 32, Number 6 (1989), pages 678–687.
- [Stallings 2000]** W. Stallings, *Operating Systems, Fourth Edition*, Prentice Hall (2000).
- [Stallings 2003]** W. Stallings, *Cryptography and Network Security: Principles and Practice, Third Edition*, Prentice Hall (2003).
- [Stankovic 1982]** J. S. Stankovic, “Software Communication Mechanisms: Procedure Calls Versus Messages”, *Computer*, Volume 15, Number 4 (1982).
- [Staunstrup 1982]** J. Staunstrup, “Message Passing Communication Versus Procedure Call Communication”, *Software—Practice and Experience*, Volume 12, Number 3 (1982), pages 223–234.

- [Stephenson 1983] C. J. Stephenson, “Fast Fits: A New Method for Dynamic Storage Allocation”, *Proceedings of the Ninth Symposium on Operating Systems Principles* (1983), pages 30–32.
- [Stevens 1992] R. Stevens, *Advanced Programming in the UNIX Environment*, Addison-Wesley (1992).
- [Stevens 1999] W. R. Stevens, *UNIX Network Programming Interprocess Communications—Volume 2*, Prentice Hall (1999).
- [Stokes 2007] J. Stokes, *Inside the Machine*, No Starch Press (2007).
- [Su 1982] Z. Su, “A Distributed System for Internet Name Service”, *Network Working Group, Request for Comments: 830* (1982).
- [Sugerman et al. 2001] J. Sugerman, G. Venkitachalam, and B. Lim, “Virtualizing I/O Devices on VMware Workstation’s Hosted Virtual Machine Monitor”, *2001 USENIX Annual Technical Conference* (2001).
- [Sun 1990] *Network Programming Guide*. Sun Microsystems (1990).
- [Talluri et al. 1995] M. Talluri, M. D. Hill, and Y. A. Khalidi, “A New Page Table for 64-bit Address Spaces”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1995).
- [Tamches and Miller 1999] A. Tamches and B. P. Miller, “Fine-Grained Dynamic Instrumentation of Commodity Operating System Kernels”, *USENIX Symposium on Operating Systems Design and Implementation* (1999).
- [Tanenbaum 1990] A. S. Tanenbaum, *Structured Computer Organization, Third Edition*, Prentice Hall (1990).
- [Tanenbaum 2001] A. S. Tanenbaum, *Modern Operating Systems*, Prentice Hall (2001).
- [Tanenbaum 2003] A. S. Tanenbaum, *Computer Networks, Fourth Edition*, Prentice Hall (2003).
- [Tanenbaum and Van Renesse 1985] A. S. Tanenbaum and R. Van Renesse, “Distributed Operating Systems”, *ACM Computing Surveys*, Volume 17, Number 4 (1985), pages 419–470.
- [Tanenbaum and Woodhull 1997] A. S. Tanenbaum and A. S. Woodhull, *Operating System Design and Implementation, Second Edition*, Prentice Hall (1997).
- [Tay and Ananda 1990] B. H. Tay and A. L. Ananda, “A Survey of Remote Procedure Calls”, *Operating Systems Review*, Volume 24, Number 3 (1990), pages 68–79.
- [Teorey and Pinkerton 1972] T. J. Teorey and T. B. Pinkerton, “A Comparative Analysis of Disk Scheduling Policies”, *Communications of the ACM*, Volume 15, Number 3 (1972), pages 177–184.
- [Tevanian et al. 1987] A. Tevanian, Jr., R. F. Rashid, D. B. Golub, D. L. Black, E. Cooper, and M. W. Young, “Mach Threads and the Unix Kernel: The Battle for Control”, *Proceedings of the Summer USENIX Conference* (1987).

- [Thekkath et al. 1997]** C. A. Thekkath, T. Mann, and E. K. Lee, “Frangipani: A Scalable Distributed File System”, *Symposium on Operating Systems Principles* (1997), pages 224–237.
- [Thompson 1984]** K. Thompson, “Reflections on Trusting Trust”, *Communications of ACM*, Volume 27, Number 8 (1984), pages 761–763.
- [Thorn 1997]** T. Thorn, “Programming Languages for Mobile Code”, *ACM Computing Surveys*, Volume 29, Number 3 (1997), pages 213–239.
- [Toigo 2000]** J. Toigo, “Avoiding a Data Crunch”, *Scientific American*, Volume 282, Number 5 (2000), pages 58–74.
- [Vahalia 1996]** U. Vahalia, *Unix Internals: The New Frontiers*, Prentice Hall (1996).
- [Venners 1998]** B. Venners, *Inside the Java Virtual Machine*, McGraw-Hill (1998).
- [Wahbe et al. 1993]** R. Wahbe, S. Lucco, T. E. Anderson, and S. L. Graham, “Efficient Software-Based Fault Isolation”, *ACM SIGOPS Operating Systems Review*, Volume 27, Number 5 (1993), pages 203–216.
- [Wallach et al. 1997]** D. S. Wallach, D. Balfanz, D. Dean, and E. W. Felten, “Extensible Security Architectures for Java”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1997).
- [Wilkes et al. 1996]** J. Wilkes, R. Golding, C. Staelin, and T. Sullivan, “The HP AutoRAID Hierarchical Storage System”, *ACM Transactions on Computer Systems*, Volume 14, Number 1 (1996), pages 108–136.
- [Williams 2002]** N. Williams, “An Implementation of Scheduler Activations on the NetBSD Operating System”, *2002 USENIX Annual Technical Conference, FREENIX Track* (2002).
- [Wilson et al. 1995]** P. R. Wilson, M. S. Johnstone, M. Neely, and D. Boles, “Dynamic Storage Allocation: A Survey and Critical Review”, *Proceedings of the International Workshop on Memory Management* (1995), pages 1–116.
- [Wolf 2003]** W. Wolf, “A Decade of Hardware/Software Codesign”, *Computer*, Volume 36, Number 4 (2003), pages 38–43.
- [Wood and Kochan 1985]** P. Wood and S. Kochan, *UNIX System Security*, Hayden (1985).
- [Woodside 1986]** C. Woodside, “Controllability of Computer Performance Tradeoffs Obtained Using Controlled-Share Queue Schedulers”, *IEEE Transactions on Software Engineering*, Volume SE-12, Number 10 (1986), pages 1041–1048.
- [Worthington et al. 1994]** B. L. Worthington, G. R. Ganger, and Y. N. Patt, “Scheduling Algorithms for Modern Disk Drives”, *Proceedings of the ACM Sigmetrics Conference on Measurement and Modeling of Computer Systems* (1994), pages 241–251.
- [Worthington et al. 1995]** B. L. Worthington, G. R. Ganger, Y. N. Patt, and J. Wilkes, “On-Line Extraction of SCSI Disk Drive Parameters”, *Proceedings of the ACM Sigmetrics Conference on Measurement and Modeling of Computer Systems* (1995), pages 146–156.

- [Wulf 1969] W. A. Wulf, “Performance Monitors for Multiprogramming Systems”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1969), pages 175–181.
- [Wulf et al. 1981] W. A. Wulf, R. Levin, and S. P. Harbison, *Hydra/C.mmp: An Experimental Computer System*, McGraw-Hill (1981).
- [Yeong et al. 1995] W. Yeong, T. Howes, and S. Kille, “Lightweight Directory Access Protocol”, *Network Working Group, Request for Comments: 1777* (1995).
- [Young et al. 1987] M. Young, A. Tevanian, R. Rashid, D. Golub, and J. Eppinger, “The Duality of Memory and Communication in the Implementation of a Multiprocessor Operating System”, *Proceedings of the ACM Symposium on Operating Systems Principles* (1987), pages 63–76.
- [Yu et al. 2000] X. Yu, B. Gum, Y. Chen, R. Y. Wang, K. Li, A. Krishnamurthy, and T. E. Anderson, “Trading Capacity for Performance in a Disk Array”, *Proceedings of the 2000 Symposium on Operating Systems Design and Implementation* (2000), pages 243–258.
- [Zabatta and Young 1998] F. Zabatta and K. Young, “A Thread Performance Comparison: Windows NT and Solaris on a Symmetric Multiprocessor”, *Proceedings of the 2nd USENIX Windows NT Symposium* (1998).
- [Zapata and Asokan 2002] M. Zapata and N. Asokan, “Securing Ad Hoc Routing Protocols”, *Proc. 2002 ACM Workshop on Wireless Security* (2002).

