

Bibliography

- [1] Will Adams. Verifying adder circuits using powerlists. Technical Report TR 94-02, Dept. of Computer Science, Univ. of Texas at Austin, Austin, Texas 78712, Mar 1994.
- [2] Alfred V. Aho and Jeffrey D Ullman. *Foundations of Computer Science*. W. H. Freeman, 1995.
- [3] J. Backus. Can programming be liberated from the von Neumann style? A functional style and its algebra of programs. *Communications of the ACM*, 21(8):613–641, Aug 1978. Turing Award Lecture (1977).
- [4] Kenneth Batcher. Sorting networks and their applications. In *Proc. AFIPS Spring Joint Computer Conference*, volume 32, pages 307–314, Reston, VA, 1968. AFIPS Press.
- [5] R. S. Bird. Lectures on constructive functional programming. In Manfred Broy, editor, *Constructive Methods in Computing Science*, NATO ASI Series F: Computer and Systems Sciences, pages 151–216. Springer-Verlag, 1989.
- [6] Richard Bird. *Introduction to Functional Programming using Haskell*. International Series in Computer Science, C.A.R. Hoare and Richard Bird, Series Editors. Prentice-Hall, 1998.
- [7] Guy E. Blelloch. *Vector Models for Data-Parallel Computing*. MIT Press, 1990.
- [8] Guy E. Blelloch. NESL: A nested data-parallel language. Technical Report CMU-CS-93-129, Carnegie-Mellon Univ., School of Computer Science, Apr 1993.
- [9] M. Burrows and D. J. Wheeler. A Block-sorting Lossless Data Compression Algorithm. Technical Report 124, Digital, SRC Research Report, May 1994.
- [10] K. Mani Chandy and Jayadev Misra. *Parallel Program Design: A Foundation*. Addison-Wesley, 1988.

- [11] Alonzo Church. *The Calculi of Lambda Conversion*. Princeton University Press, 1941.
- [12] J. M. Cooley and J. W. Tukey. An algorithm for the machine calculation of complex Fourier series. *Math. Comp.*, 19(90):297–301, 1965.
- [13] Jeffrey Dean and Sanjay Ghemawat. MapReduce: Simplified data processing on large clusters. In *Sixth Symposium on Operating System Design and Implementation*, OSDI, San Francisco, CA, December 2004.
- [14] W. Diffie and M. Hellman. New directions in cryptography. *IEEE Trans. Inform. Theory*, 22(6):644–654, 1976.
- [15] Edsger W. Dijkstra. The humble programmer. *Commun. ACM*, 15(10):859–866, 1972. Turing Award lecture.
- [16] Edsger W. Dijkstra. Pruning the search tree, EWD 1255. <http://www.cs.utexas.edu/users/EWD/ewd12xx/EWD1255.PDF>, January 1997. circulated privately.
- [17] Hans-Erik Eriksson and Magnus Penker. *Business Modeling with UML: Business Patterns at Work*. John Wiley, February 2000.
- [18] G.-J.Nam, K.A.Sakallah, and R.Rutenbar. Satisfiability based FPGA routing. *Proceedings of the International Conference on VLSI Design*, January 1999.
- [19] F. Gray. Pulse code communication. U.S. Patent 2,632,058, Mar 1953.
- [20] David Harel and Michal Politi. *Modeling Reactive Systems with Statecharts*. McGraw-Hill, 1998.
- [21] Haskell 98: A non-strict, purely functional language. Available at <http://haskell.org/onlinereport>, 1999.
- [22] Paul Hudak, Jon Peterson, and Joseph Fasel. A Gentle Introduction to Haskell, Version 98. Available at <http://www.haskell.org/tutorial/>, 2000.
- [23] K. Iverson. *A Programming Language*. John Wiley and Sons, 1962.
- [24] Geraint Jones and Mary Sheeran. Circuit design in Ruby. In Jørgen Staunstrup, editor, *Formal Methods for VLSI Design*. North-Holland, 1990.
- [25] D. Kapur and M. Subramaniam. Automated reasoning about parallel algorithms using powerlists. Manuscript in preparation, 1994.
- [26] Richard M. Karp and Vijaya Ramachandran. Parallel algorithms for shared memory machines. In J. van Leeuwen, editor, *Handbook of Theoretical Computer Science*. Elsevier and the MIT Press, 1990.

- [27] Henry Kautz and Bart Selman. Planning as satisfiability. *Proceedings of the 10th European Conference on Artificial Intelligence (ECAI 92)*, 1992.
- [28] D. E. Knuth. *Fundamental Algorithms*, volume 1 of *The Art of Computer Programming*. Addison-Wesley, Reading, Massachusetts, 1997.
- [29] D. E. Knuth. *Sorting and Searching*, volume 3 of *The Art of Computer Programming*. Addison-Wesley, Reading, Massachusetts, 1998.
- [30] Donald E. Knuth. The Complexity of Songs. *Communications of the ACM*, 27(4):344–348, Apr 1984.
- [31] Jacob Kornerup. Mapping a functional notation for parallel programs onto hypercubes. *Information Processing Letters*, 53:153–158, 1995.
- [32] R. E. Ladner and M. J. Fischer. Parallel prefix computation. *Journal of the Association for Computing Machinery*, 27(4):831–838, 1980.
- [33] Tracy Larrabee. *Efficient generation of test patterns using boolean satisfiability*. PhD thesis, Stanford University, 1990.
- [34] F. Thompson Leighton. *Introduction to Parallel Algorithms and Architectures*. Morgan Kaufmann Publishers, San Mateo, California, 1992.
- [35] Philip M. Lewis, Arthur Bernstein, and Michael Kifer. *Databases and Transaction Processing*. Addison-Wesley, 2002.
- [36] J. Marques-Silva and K.A.Sakallah. Boolean satisfiability in electronic design automation. *Proceedings of the ACM/IEEE Design Automation Conference*, June 2000.
- [37] John McCarthy, Paul W. Abrahams, Daniel J. Edwards, Timothy P. Hart, and Michael I. Levin. *LISP 1.5 Programmer's Manual*. MIT Press, 1962.
- [38] Robin Milner, Mads Tofte, and Robert Harper. *The Definition of Standard ML*. MIT Press, 1990.
- [39] Matthew W. Moskewicz, Conor F. Madigan, Ying Zhao, Lintao Zhang, and Sharad Malik. Chaff: Engineering an Efficient SAT solver. In *Proceedings of the 39th Design Automation Conference*, June 2001.
- [40] Z. G. Mou and P. Hudak. An algebraic model for divide-and-conquer algorithms and its parallelism. *The Journal of Supercomputing*, 2(3):257–278, Nov 1988.
- [41] Z.G. Mou. Divacon: A parallel language for scientific computing based on divide-and-conquer. In *Proc. 3rd Symp. on the Frontiers of Massively Parallel Computation*, pages 451–461, Oct 1991.
- [42] Franco P. Preparata and Jean Vuillemin. The cube-connected cycles: A versatile network for parallel computation. *Communications of the ACM*, 24(5):300–309, May 1981.

- [43] Ham Richards. Overhead foils for lectures on Haskell. Available at <http://www.cs.utexas.edu/users/ham/CS378Slides.pdf>, 2002.
- [44] R.L. Rivest, A. Shamir, and L. Adelman. A method for obtaining digital signatures and public key cryptosystems. *Communications of the ACM*, 21(2):120–126, Feb 1978.
- [45] Claude E. Shannon. A mathematical theory of communication. *The Bell System Technical Journal*, 27:379–423, 1948.
- [46] Claude E. Shannon. Prediction and entropy of printed English. *The Bell System Technical Journal*, 30:50–64, 1950.
- [47] Simon Singh. *The Code Book*. Doubleday, 1999.
- [48] Guy L. Steele Jr. Personal communication, 1993.
- [49] Guy L. Steele Jr. and Daniel Hillis. Connection Machine Lisp: Fine-grained parallel symbolic processing. In *Proc. 1986 ACM Conference on Lisp and Functional Programming*, pages 279–297, Cambridge, Mass., Aug 1986. ACM SIGPLAN/SIGACT/SIGART.
- [50] The home page for the mChaff and zChaff sat solvers. <http://www.ee.princeton.edu/~chaff/software.php>, 2002.
- [51] Simon Thompson. *The Craft of Functional Programming*. Addison-Wesley Longman, Harlow, Essex, 1996.
- [52] David Turner. An overview of Miranda. *ACM SIGPLAN Notices*, 21:156–166, Dec 1986.
- [53] X. Wang and Z.G. Mou. A divide-and-conquer method of solving tridiagonal systems on hypercube massively parallel computers. In *proc. of the 3rd IEEE symposium on parallel and distributed processing*, pages 810–817, Dallas, Tx., Dec 1991.
- [54] J. Ziv and A. Lempel. Compression of individual sequences via variable-rate coding. *IEEE Transactions on Information Theory*, IT-24(5):530–536, Sept. 1978.