Bibliography

[Bal88] BAL, H. E., AND TANENBAUM, A. S. 1988. Distributed programming with shared data. In *Proceedings of the IEEE International Conference on Computer Languages* (Miami), pp. 82-91.

[Bal89] BAL, H. E., STEINER, J. G., AND TANENBAUM, A. S. 1989. Programming languages for distributed computing systems. In *ACM Computing Surveys 21*, 3, pp. 261-322.

[Benker89] BENKER, H. ET AL. 1989. The knowledge crunching machine at ECRC: A joint R&D project of a high speed prolog system. In *ICL Technical Journal*, Nov. 1989, pp. 737-753.

[Bernstein81] BERNSTEIN, P. A., AND GOODMAN, N. 1981. Concurrency control in distributed database systems. In *Computing Surveys 13*, 2, pp 185-221.

[Bowen81] BOWEN, D. L., BYRD, L., PEREIRA, L. M., PEREIRA, F. C. N., AND WARREN, D. H. D. 1981. PROLOG on the DECSystem-10 user's manual. Technical Report, Dept. of Artificial Intelligence, University of Edinburgh, Scotland.

[Clark84] CLARK, K. L., AND GREGORY, S. 1984. PARLOG: Parallel programming in logic. Research Report DOC 84/4, Dept. of Computing, Imperial College of Science and Technology, London.

[Clocksin84] CLOCKSIN, W. F., AND MELLISH, C. S. 1984. *Programming in Prolog.* Springer-Verlag, Berlin.

[Coffman71] COFFMAN, E. G., ELPHICK, M. J., AND SHOSHANI, A. 1971. System deadlocks. In *Computing Surveys 3*, 2, pp. 67-78.

[Conery87] CONERY, J. S. 1987. *Parallel Execution of Logic Programs.* Kluwer Academic Publishers, Boston.

[Dijkstra75] DIJKSTRA, E. W. 1975. Guarded commands, nondeterminacy and formal derivation of programs. In *Communications of the ACM 18*, 8, pp. 453-457.

[Dijkstra83] DIJKSTRA, E. W., FEIJEN, W. H. J., AND VAN GASTEREN, A. J. M. 1983. Derivation of a termination detection algorithm for distributed computations., In *Information Processing Letters 16*, 5, pp. 217-219.

[vanEmden76] VAN EMDEN, M. H., AND KOWALSKI, R. A. 1976. The semantics of predicate logic as a programming language. In *Journal of the ACM 23*, 4, pp. 733-742.

[vanEmden82] VAN EMDEN, M. H., AND DE LUCENA FILHO, G. J. 1982. Predicate logic as a language for parallel programming. In *Logic Programming*, K. L. Clark, and S.-A. Tärnlund, Eds. Academic Press, London, pp. 189-198.

[Flynn66] FLYNN, M. J. 1966. Very high-speed computing systems. In *Proceedings of the IEEE 54*, 12, pp. 1901-1909.

[Foster87] FOSTER, I., AND TAYLOR, S. 1987. Flat Parlog: A basis for comparison. In *International Journal of Parallel Programming 16*, 2, pp. 87-125.

[Foster88] FOSTER, I. 1988. Parallel implementation of Parlog. In *Proceedings of the International Conference on Parallel Processing* (St. Charles), Ill., Vol. II, pp. 9-16.

[Foster89] FOSTER, I. 1989. A multicomputer garbage collector for a single assignment language. In *International Journal of Parallel Programming 18*, 3, pp. 181-203.

[Foster90] FOSTER, I., AND TAYLOR, S. 1990. *Strand, New Concepts in Parallel Programming.* Prentice-Hall, Englewood Cliffs, New Jersey.

[Fuchi86] FUCHI, K., AND FURUKAWA, K. 1987. The role of logic programming in the Fifth Generation Computer Project. In *New Generation Computing 5*, 1, pp. 3-28.

[Funke92] FUNKE, R. ET AL. 1992. An optimized reconfigurable architecture for Transputer networks. In *Proceedings of the 25th Hawaii International Conference on Computer Sciences* (Hawaii), pp. 237-245.

[Gray92] GRAY, R. W. ET AL. 1992. Eli: A complete compiler construction system. In *Communications of the ACM 35*, 2, pp. 121-131.

[Gregory87] GREGORY, S. 1987. *Parallel Logic Programming in PARLOG: The Language and Its Implementation.* Addison-Wesley Publishing Company, Wokingham, England.

[Glaesser90a] GLÄSSER, U., KÄRCHER, M., LEHRENFELD, G., AND VIETH, N. 1990A. Flat Concurrent Prolog on Transputers. In *Proceedings of the IFIP Working Conference on Decentralized Systems* (Lyon), C. Girault and M. Cosnard, Eds. North-Holland, Amsterdam, pp. 183-194.

[Glaesser90b] GLÄSSER, U., KÄRCHER, M., LEHRENFELD, G., AND VIETH, N. 1990B. Flat Concurrent Prolog on Transputers. In *Journal of Microcomputer Applications: Special Issue on Transputer Applications 13, 1, pp. 3-18* (extended version of [Glaesser90a]).

[Glaesser90c] GLÄSSER, U., AND LEHRENFELD, G. 1990C. A distributed implementation of Flat Concurrent Prolog on Transputer architectures. In *Proceedings of the UNESCO Conference on Parallel Computing in Engineering and Engineering Education* (Paris), pp. 181-185.

[Glaesser91a] GLÄSSER, U., KÄRCHER, M., AND LEHRENFELD, G. 1991. Dynamische Partitionierung asynchroner Prozeßnetzwerke am Beispiel Paralleler Logischer Programmierung. To appear in *Proceedings of the TAT '91* (Aachen, FRG, Sep. 17-18, 1991), Informatik-Fachberichte, Springer-Verlag, Berlin.

[Glaesser91b] GLÄSSER, U., HANNESEN, G., KÄRCHER, M., AND LEHRENFELD, G. 1991. A distributed implementation of Flat Concurrent Prolog on multi-Transputer environments. To appear in *Proceedings of the First International Conference of the Austrian Center for Parallel Computation* (Salzburg, Sep. 29 - Oct. 02, 1991), Lecture Notes in Computer Science, Springer-Verlag, Berlin.

[Glaesser92] GLÄSSER, U. 1992. A distributed implementation of Flat Concurrent Prolog on multi-Transputer environments. In *Distributed Prolog*, P. Kacsuk and M. Wise, Eds. John Wiley & Sons Ltd., Chichester, pp. 287-309.

[van de Goor89] VAN DE GOOR, A. J. 1989. *Computer Architecture and Design.* Addison-Wesely, New York.

[Grunzig92] GRUNZIG, P. 1992. Konzepte zur Hardware-Realisierung der Reduktionseinheit einer parallelen FCP-Maschine (Diplomarbeit). Paderborn University, Dept. of Mathematics & Computer Science, Paderborn, FRG, Feb. 1992.

[Hannesen91] HANNESEN, G. 1991. Implementierung und Optimierung von sequentiellen und parallelen FCP-Maschinen (Diplomarbeit). Paderborn University, Dept. of Mathematics & Computer Science, Paderborn, FRG, June 1991.

[Harel85] HAREL, D., AND PNUELI, A. 1985. On the development of reactive systems. In *Logics and Models of Concurrent Systems.* K. R. Apt, Ed. Lecture Notes in Computer Science, Springer-Verlag, Berlin.

[Hoare78] HOARE, C. A. R. 1978. Communicating sequential processes. In *Communications of the ACM 21*, 8, pp. 666-677.

[Houri87] HOURI, A., AND SHAPIRO, E. 1987. A sequential abstract machine for Flat Concurrent Prolog. In *Concurrent Prolog: Collected Papers.* Vol. 2, E. Shapiro, Ed. MIT Press, Cambridge, Mass., pp. 513-574.

[Ichiyoshi87] ICHIYOSHI, N., MIYAZAKI, T., AND TAKI, K. 1987. A distributed implementation of Flat GHC on the Multi-PSI. In *Logic Programming - Proceedings of the Fourth International Conference on Logic Programming* (Melbourne), J.-L. Lassez, Ed. MIT Press Cambridge, pp. 257-275.

[INMOS91] INMOS LTD. 1991. *The T9000 Transputer Products Overview Manual.* INMOS Databook series, Marlow, UK.

[Kaercher92] KÄRCHER, M. 1992. Automatische Parallelisierung am Beispiel eines verteilten FCP-Interpreters (Diplomarbeit). Paderborn University, Dept. of Mathematics & Computer Science, Paderborn, FRG (available before July, 1992).

[Kleine Buening86] KLEINE BÜNING, H., AND SCHMITGEN, S. 1986. *PROLOG.* B. G. Teubner Stuttgart.

[Kliger88] KLIGER, S., YARDENI, E., KAHN, K., AND SHAPIRO, E. 1988. The language FCP(:,?). In *Proceedings of the International Conference on Fifth Generation Computer Systems* (Tokyo), Ohmsha Ltd. Tokyo, Springer-Verlag, Berlin, pp. 763-773.

[Kowalski79a] KOWALSKI, R. 1979A. Algorithm = logic + control. In *Communications of the ACM 22, 7, pp. 424-436.*

[Kowalski79b] KOWALSKI, R. 1979B. *Logic for Problem Solving.* North-Holland, Amsterdam.

[Kurfess91] KURFESS, F. 1991. *Parallelism in Logic: Its Potential for Performance and Program Development.* Verlag Vieweg, Braunschweig, FRG.

[Lehrenfeld90] LEHRENFELD, G. 1990. Konzeption und Implementierung einer parallelen FCP-Maschine (Diplomarbeit). Paderborn University, Dept. of Mathematics & Computer Science, Paderborn, FRG, Dec. 1990.

[Leighton92] LEIGHTON, F. T. 1992. *Introduction to Parallel Algorithms and Architectures: Arrays ∘ Trees ∘ Hypercubes.* Morgan Kaufmann Publishers, San Mateo, Calif.

[Lueling91] LÜLING, R., MONIEN, B., AND RAMME, F. 1991. Load balancing in large networks: A comparative study. In *Proceedings of the 3rd IEEE Symposium on Parallel and Distributed Processing* (Dallas), pp. 686-689.

[Lueling92] LÜLING, R., AND MONIEN, B. 1992. Load balancing for distributed branch & bound algorithms. In *Proceedings of the 6th International Parallel Processing Symposium* (Beverly Hills), pp. 543-549.

[May85] MAY, D., AND SHEPHERD, R. 1985. Occam and the Transputer. In *Concurrent Languages in distributed Systems.* G. L. Reijens, and E. L. Dagless, Eds. North-Holland, Amsterdam, pp. 19-33.

[May90] MAY, D. 1990 Future directions in Transputer technology. In *Proceedings of UNESCO Conference on Parallel Computing in Engineering and Engineering Education* (Paris), pp. 193-203.

[Mierowsky85] MIEROWSKY, C., TAYLOR, S., SHAPIRO, E., LEVY, J., AND SAFRA, S. 1985. The design an implementation of Flat Concurrent Prolog. Technical Report CS85-9, Dept. of Computer Science, The Weizmann Institute of Science, Rehovot, Israel.

[Nakajima92] NAKAJIMA, K. 1992. Distributed implementation of KL1 on the Multi-PSI. In *Distributed Prolog*, P. Kacsuk and M. Wise, Eds. John Wiley & Sons Ltd., Chichester (To appear in June 1992).

[Okumura87] OKUMURA, A., AND MATSUMOTO, Y. 1987. Parallel programming with layered streams. In *Proceedings of the IEEE Symposium on Logic Programming* (San Francisco). IEEE New York, pp. 224-231.

[Parsec89] PARSEC 1989. *Par.C System: User's Manual and Library Reference Version 1.22.* Parsec Developments, Leiden, The Netherlands.

[Pnueli86] PNUELI, A. 1986. Applications of temporal logic to the specification and verification of reactive systems: A survey of current trends. In *Current Trends in Concurrency, Overviews and Tutorials*, Lecture Notes in Computer Science, Vol. 224, J. W. de Bakker, W.-P. de Roever, and G. Rozenberg, Eds. Springer-Verlag, New York, pp. 510-584.

[Ramme90] RAMME, F. 1990. Lastausgleichsverfahren in verteilten Systemen (Diplomarbeit). Paderborn University, Dept. of Mathematics & Computer Science, Paderborn, FRG, March 1990.

[Rokusawa88] ROKUSAWA, K., ICHIYOSHI, N., CHIKAYAMA, T., AND NAKASHIMA, H. 1988. An efficient termination detection and abortion algorithm for distributed processing systems. In *Proceedings of the International Conference on Parallel Processing*, Vol. I, pp. 18-22.

[Shapiro83] SHAPIRO, E. 1983. A subset of concurrent prolog and its interpreter. ICOT Technical Report TR-003, Institute for New Generation Computer Technology, Tokyo.

[Shapiro86] SHAPIRO, E. 1986. Concurrent Prolog: A progress report. *IEEE Computer 19, 8, pp. 44-58.*

[Shapiro89] SHAPIRO, E. 1989. The family of concurrent logic programming languages. In *ACM Computing Surveys 21*, 3, pp. 413-510.

[Silverman87] SILVERMAN, W., HIRSCH, M., HOURI, A., AND SHAPIRO, E. 1987. The Logix system user manual version 1.21. In *Concurrent Prolog : Collected Papers.* Vol. 2, E. Shapiro, Ed. MIT Press, Cambridge, Mass., pp. 46-77.

[Takeda90] TAKEDA, Y., NAKASHIMA, H., MASUDA, K., CHIKAYAMA, T., AND TAKI, K. 1990. A load balancing mechanism for large scale multiprocessor systems and its implementation. In *New Generation Computing*, 7, pp. 179-195.

[Takeuchi87] TAKEUCHI, A., AND FURUKAWA, K. 1987. Parallel logic programming Languages. In *Proceedings of the 3rd International Conference on Logic Programming* (London), Lecture Notes in Computer Science, Vol. 225, Springer-Verlag, New York, pp. 242-254

[Tanenbaum87] TANENBAUM, A. S. 1987 *Operating Systems: Design and Implementation.* Prentice-Hall, Englewood Cliffs, New Jersey.

[Taylor87] TAYLOR, S., SAFRA, S., AND SHAPIRO, E. 1987. A parallel implementation of Flat Concurrent Prolog. In *International Journal of Parallel Programming 15*, 3, pp. 245-275.

[Taylor89] TAYLOR, S. 1989. *Parallel Logic Programming Techniques.* Prentice-Hall, Englewood Cliffs, New Jersey.

[Treleaven82] TRELEAVEN, P. C., BROWNBRIDGE, D. R., AND RICHARD, P. H. 1982. Data-driven and demand-driven computer architecture. In *ACM Computing Surveys 14*, 1, pp. 93-143.

[Ueda86] UEDA , K. 1986. Guarded Horn clauses. In *Logic Programming.* Lecture Notes in Computer Science, Vol. 221, Springer-Verlag, Berlin, pp. 168-179.

[Ueda89] UEDA, K. 1989. Parallelism in logic programming. In *Proceedings of the IFIP Congress*, North-Holland, Amsterdam, pp. 957-964.

[Van Roy92] VAN ROY, P., AND DESPAIN, A. M. 1992. High-performance logic programming with the Aquarius Prolog Compiler. In *IEEE Computer 25*, 1, pp. 54-68.

[Warren83] WARREN, D. H. D. 1983. An abstract Prolog instruction set. Technical Note 309, Artificial Intelligence Center, SRI.

[Weinbaum87] WEINBAUM, D., AND SHAPIRO, E. 1987. Hardware description and simulation using Concurrent Prolog. In *Proceedings of the CHDL '87*, Elsevier Science Publishing, pp. 9-27.

[Xu90] XU, J., AND HWANG, K. 1990. Dynamic load balancing for parallel program execution on a message-passing multicomputer. In *Proceedings of the Second IEEE Symposium on Parallel and Distributed Processing* (Dallas), pp. 402-406.

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