Distributed / Parallel Logic Programming

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The following collection of references may be unusual but it reflects the implementation of quite some LP system components and extensions we’ve implemented: Native code backends, FP extensions, 3D game libraries, JVM and .NET CLR code generators (WAM based), Virtual reality worlds controlled by LP systems, LP embedded in mobile devices (only repeat-driven loops), distributed / parallel processing, and other issues.

Logic programming implementation / application issues: Compiler construction / optimizations, Efficient operator precedence (bottom-up) parsers, Native code backend specifications, Multi-threaded runtime systems and automatic memory management, Parallel active objects and synchronization, Multi-language interoperability,

Rule-based 3D multi-player games and intelli-bots, Constraints-based problem solving models, Networked virtual worlds and distributed artificial intelligence, Virtual Reality Modeling, 3D simulation visualizations,

Robust software systems (myths and reality): Strong typing myths versus strong testing reality, ...

Work in progress: about 22 pages of this bibliography should be removed and about 6 pages (w better, more appropriate ) LP entries should be added ...

References


[Bruynooghe, 1982 (ICLP)] M. Bruynooghe, A Note on Garbage-Collection in Prolog Interpreters, in [Caneghem, ICLP 1982], pp. 52–55


[Cabeza and Hermenegildo, 2000] Daniel Cabeza and Manuel Hermenegildo, *A New Module System for Prolog*, in *Lloyd et al., CL 2000*


[Chailloux et al., 2004] Emmanuel Chailloux, Grégoire Henry, and Raphaël Montelatici, Mixing the Objective Caml and C# Programming Models in the .NET Framework, International Workshop on Multiparadigm Programming with OO Languages, June 2004 (A=F)


[Chung et al., 2000] Yoo C. Chung, Soo-Mook Moon, Kemal Ebecioğlu, and
Dan Sahlin, Reducing sweep time for a nearly empty heap, in Proceedings of the 27th ACM SIGPLAN-SIGACT Symposium on Principles of
Programming Languages, pp. 378–389, 2000 (A=F)

programming in software engineering, 1992

[Ciancarini and Levi, 1992 (b)] P. Ciancarini and G. Levi, What
is Logic Programming good for in Software Engineering?, in

[Ciancarini, 1992 (c)] P. Ciancarini, Parallel programming with logic lan-
guages, a survey, Computer Languages, 17(4), pp. 213–239, 1992

[Ciancarini and Sterling, 1996] P. Ciancarini and L. Sterling (eds.), Applica-
tions of logic programming in software engineering, International Journal
on Software Engineering and Knowledge Engineering, 6(1), 1996

[Ciepielewski et al., 1989] Andrzej Ciepielewski, Seif Haridi and Bogumil
Hausman, Or-Parallel Prolog on Shared Memory Multiprocessors, Journal

[Clark et al., 1982] K.L. Clark, F.G. McCabe and S.Gregory, IC-Prolog Lan-
guage Features, in Clark and Tärnlund, 1982, pp. 253–266, 1982

[Clark and Tärnlund, 1982] Keith L. Clark and Sten-Åke Tärnlund (eds.),
Logic Programming, Academic Press, 1982

[Clark and Gregory, 1985] Keith Clark and Steve Gregory, Notes on the Im-
plementation of Parlog, Journal of Logic Programming, 2(1), pp. 17–42,
April 1985

[Clark and Gregory, 1986] Keith L. Clark and Steve Gregory, Parlog: Paral-
lel Programming in Logic, ACM Transactions on Programming Languages
and Systems, 8(1), pp. 1–49, Jan 1986

[Clark, 1990] K.L. Clark, Parallel Logic Programming, Computer Journal,
33(6), pp. 482–493, 1990


[Colmerauer, 1982 (NLP)] Alain Colmerauer, *An Interesting Subset of Natural Language*, in [Clark and Tārnlund, 1982], pp. 46–66


[Cousot et al., WSA’93] Patrick Cousot, Moreno Falaschi, Gilberto Filé, and Antoine Rauzy (eds.), *Static Analysis, Proceedings Third International Workshop*, Lecture Notes in Computer Science, 724, Springer-Verlag, Sept 1993


[Crammond and Lindholm, 1993] Jim Crammond and Tim Lindholm, Memory management in Quintus Prolog, in [Tick and Succi, 1993], pp. 35–42


[Dart and Zobel, 1992] Philip W. Dart and Justin Zobel, Efficient Run-Time Type Checking of Typed Logic Programs, Journal of Logic Programming, 14(1,2,3 & 4), pp. 31–69, 1992 (A=C)


[Demoen and Sagonas, 1998] Bart Demoen and Konstantinos Sagonas, Memory Management for Prolog with Tabling, in [Peyton Jones and Jones, ISMM 1998], pp. 97–106 (A=F)


[Demoen, 2002] Bart Demoen, A Different Look at Garbage Collection for the WAM, in [Stuckey, ICLP 2002]
[Demoen et al., 2002] Bart Demoen, Phuong-Lan Nguyen, and Ruben Vandeginste, *Copying Garbage Collection for the WAM: To Mark or Not to Mark?*, in *Stuckey, ICLP 2002*


[Dutra et al., 1997] Inês Dutra, Vitor Santos Costa, Fernando Silva, Enrico Pontelli and Gopal Gupta (eds.), *Proceedings of the Workshop on Parallelism and Implementation Technology for (Constraint) Logic Program-


[Ferreira and Damas, 2003] Michel Ferreira and Luis Damas, WAM Local Analysis, in [Dahl and Wadler, PADL 2003], pp. 286–303


a survey, ACM Transactions on Programming Languages and Systems, 23(4), pp. 472–602, July 2001 (A=F)


[Haemmerle and Fages, 2006] Rémy Haemmerlé and Francois Fages, Modules for Prolog Revisited, in [Etalle and Truszczynski, ICLP 2006], pp. 41–55 (A=F)


[Hanus, CC’94] M. Hanus, Towards the Global Optimization of Functional Logic Programs, in Proc. 5th International Conference on Compiler Construction, Lecture Notes in Computer Science, 786, pp. 68–82, Springer-Verlag, 1994


[Haygood, 1994] Ralp Clarke Haygood, Native code compilation in SICStus Prolog, in [Hentenryck, ICLP’94], pp. 190–204, 1994


[Lindgren, 1996 (PHD)] Thomas Lindgren, Compilation Techniques for Prolog, PhD. dissertation, Uppsala University, 1996 (A=C)


[Lopes and Santos Costa, 2000] Ricardo Lopes and Vitor Santos Costa, Memory Management for the BEAM, in *Demoen, MM 2000*


[Makholm, 2000 (MSc)] Henning Makholm, Region-Based Memory Management in Prolog, M.Sc. Thesis, University of Copenhagen, Feb 2000 (A=C)


[Makholm, 2000 (ISMM)] Henning Makholm, A Region-based Memory Manager for Prolog, in [Chambers and Hoskin, ISMM 2000], pp. 25–34


[Schrijvers and Demoen, 2002] Tom Schrijvers and Bart Demoen, *Combining an improvement to PARMA trailing with trailing analysis*, in *[Pfenning and Kirchner, PPDP 2002]*, pp. 88-98


[Sneyers et al., 2005] Jon Sneyers, Tom Schrijvers, Bart Demoen, *Guard and Continuation Optimization for Occurrence Representations of CHR*, in *Gabbrielli and Gupta, ICLP 2005* (A=F)


[Somogyi and Stuckey, 2002] Zoltan Somogyi and Peter J. Stuckey, *Using the heap to eliminate stack accesses*, in *Pfenning and Kirchner, PPDP 2002*.


[Szuba, 1984(b)] T. Szuba, *PROLOG as a Real-Time Language for Process Control*, Angewandte Informatik (Germany) ISSN: 0013-5704, 9, pp. 370–375, 1984


[Vandeginste et al., 2002] Ruben Vandeginste, Konstantinos Sagonas, and Bart Demoen, Segment Order Preserving and Generational Garbage Collection for Prolog, in [Krishnamurthi and Ramakrishnan, PADL 2002]


