#### **CURRICULUM VITAE**

Name: Björn Olof Einar Lisper

Born: April 8, 1956, in Solna, Sweden.

Status: Married, two children, Swedish citizen.

Home address: Oxelvägen 20, S-175 64 Järfälla, Sweden (phone +46-8-36 07 99)

Professional address: Dept. of Computer Science and Engineering, University of Mälardalen, P.O. Box 883, S-721 23 Västerås, Sweden (phone +46-21-15 17 09, e-mail bjorn.lisper@mdh.se)

### **Education**

1980: M. Sc. (Civilingenjör) in Engineering Physics, KTH, Stockholm, Sweden

1984: Studies in Computer Science, Stanford University

1987: Ph. D. (TeknD) in Computer Science, KTH

1991: Docent in Computer Systems, KTH (roughly equivalent to "habilitation")

### **Employment**

1979: Military service

1980: Research engineer, Sunds Defibrator AB

1981-82: Research engineer, SCA Control Systems AB

1983-87: Teaching and Research Assistant, KTH, Dept. of Numerical Analysis and Computing Science (NADA)

1984: Research Assistant, Stanford University, Dept. of Computer Science

1987-88: Associate Research Scientist, Yale University, Dept. of Computer Science

1988-1992 Assistant Professor ("forskarassistent"), KTH, Dept. of Telecommunications and Computer Systems

1992-1999 Associate Professor (Senior Lecturer, "universitetslektor") in Computer Systems (datorsystem), KTH, Dept. of Teleinformatics (IT)

1988-1995, Researcher, Swedish Institute of Computer Science (SICS) (40% part time)

Oct. 1994 - Jan. 1995, Invited Professor, Ecole Normale Supérieure de Lyon, Laboratoire de l'Informatique du Parallélisme

July 1999- Professor in Computer Engineering, Mälardalens Högskola (MdH)

# **Teaching and Related**

Teaching at KTH (course leader and main lecturer):

1989-97: (9 occasions) Parallel Computer Systems (undergraduate level, 4th year)

1991-92: (2 occasions) Program Transformations (graduate level)

1993: Term Rewriting Systems (graduate level)

1996-98: (3 occasions) Semantics of Programming Languages (undergraduate level, 4th year, and graduate level)

1998: Computer Systems (undergraduate level, 4th year, "finger course")

At KTH, shared responsibility:

1993: Semantics of Programs and Programming Languages (graduate level)

1996,1999: Computer Systems (undergraduate level, 4th year, "finger course")

Teaching at MdH (course leader and main lecturer):

2000: Advanced Functional Languages (graduate level)

2001: Analysis of Algorithms (undergraduate level, 3rd year)

2001: Advanced Type Systems (graduate level)

2002-2004: (3 occasions) Functional Programming (undergraduate level, 3rd year)

Teaching assistant in various courses in numerical analysis, programming and computer science during last year as undergraduate student (1980) and as graduate student (1982-1987). Various guest lectures, tutorials, and industrial seminars.

Member of DUG (the steering committee for the MSc programme in Computer Engineering at KTH) 1996-1999.

#### **Academic Tasks**

Refereeing for BIT, IEEE Transactions on Computers, IEEE Transactions on Parallel and Distributed Systems, Information Processing Letters, International Journal of Parallel Programming, Formal Aspects of Computing, Parallel Processing Letters, Distributed Computing, Computational Intelligence, IEEE Computer, Journal of VLSI Signal Processing, Journal of Functional Programming, Journal of Supercomputing, Journal of Systems and Software, Parallel Algorithms and Applications, Real-Time Systems, Addison-Wesley (textbook manuscript), Science Foundation Ireland (application for funding), and various conferences.

On the local organization committee of the CONCUR'94 international conference on concurrency, Uppsala, Aug. 1994

On the program committee and local organization committee of the Euro-Par'95 international conference on parallel processing, Stockholm, Aug. 1995

On the program committee of the Seventh Swedish Workshop on Computer Systems Architecture (DSA'98), Göteborg, June 1998.

On the program committee of Second International Workshop on Engineering of Reconfigurable Hardware/Software Objects (ENREGLE), Las Vegas, June 2000,

On the program committee of International Conference on Engineering of Reconfigurable Systems and Algorithms (ERSA), 2001, 2002, 2003, 2004

On the program committee of Real-Time in Sweden 2001 and 2003 (RTiS-2001, -2003)

Chairman for Erlang User Conference 2001

Local Arrangements Chair for 8th ACM SIGPLAN International Conference on Functional Programming (ICFP 2003)

Field editor (data parallelism) for *Discrete Mathematics and Computer Science* (electronically published by Int. Thomson Publ.)

Opponent at Ph. D. defenses:

- Jonas Vasell, Dept. of Computer Engineering, Chalmers University of Technology, Sept. 1992.
- Tobias Ritzau, IDA, Linköping University, June 2003.

"Sakkunnig" (external expert evaluator) for:

- Two senior lecturerships in Computer Science at Mitthögskolan, Sundsvall, 1995
- Senior lecturership in Computer Systems at Uppsala University, 1996
- Senior lecturership in Computer Science at Chalmers Institute of Technology, 1996
- Senior lecturership in Computer Systems at Uppsala University, 1997

- Three senior lecturerships in Computer Systems at Mitthögskolan, Sundsvall, 1998
- Senior lecturership in Computer Communication Networks at Mitthögskolan, Sundsvall, 1998
- Habilitation a Diriger des Recherches (roughly docentur) of Jean-Louis Giavitto, Université Paris-Sud, 1999
- Senior lecturership (Førsteamanuensis) in Informatics (programming theory) at University of Bergen, 1999
- Professorship (befordringsprofessur) in Computer Systems for Lars Asplund, Uppsala University, 1999
- Senior lecturerships in Computer Science at Uppsala University, 2000
- Senior lecturerships in Computer Science and Computer Engineering at Högskolan i Halmstad, 2000
- Senior lecturership in Computer Engineering at Mitthögskolan, Sundsvall, 2000
- Research Assistant (forskarassistent) in Computer Systems at Uppsala University, 2001
- Senior lecturership in Computer Communication at Mitthögskolan, Sundsvall, 2002
- Research Assistant (forskarassistent) in Computer Science at Linköping University, 2002
- Senior lecturership in Computer Science at Lund University, 2003

## Member of Ph. D. evaluation committees (betygskommitteer):

- Jean-François Collard, Computer Science, Ecole Normale Supérieure de Lyon, Jan. 1995
- Håkan Grahn, Dept. of Computer Engineering, Lund University, Dec. 1995
- Mikael Pettersson, Dept. of Computer and Information Science, Linköping University, Dec. 1995
- Toomas Plaks, Dept. of Computer Engineering, Chalmers Institute of Technology, Feb. 1997
- Johan Ringström, Dept. of Computer and Information Science, Linköping University, Dec. 1997
- Christer Berg, NADA, KTH, Dec. 1997
- Magnus Carlsson, Dept. of Computing Science, Chalmers Institute of Technology, March 1998
- Henrik Nilsson, Dept. of Computer and Information Science, Linköping University, May 1998
- Pierangelo Dell'Acqua, Dept. of Computer Science, Uppsala University, Sep. 1998
- Mats Näslund, NADA, KTH, Oct. 1998
- Mattias O'Nils, ELE, KTH, June 1999
- Ashley Saulsbury, IT, KTH, Dec. 1999

- Peeter Ellervee, ELE, KTH, March 2000
- Lars Engebrektsen, NADA, KTH, April 2000
- Mikael Sjödin, Dept. of Information Technology, Uppsala University, May 2000
- Jörgen Gustafsson, Dept. of Computing Science, Chalmers Institute of Technology, June 2001
- Lars-Åke Fredlund, IT, KTH, Sep. 2001
- Tim Heyer, Dept. of Computer and Information Science, Linköping University, Dec. 2001
- Eriks Sneiders, DSV, KTH/SU, Feb. 2002
- Magnus Broberg, Department of Software Engineering and Computer Science, Blekinge Institute of Technology, May 2002
- Thomas Lundquist, Dept. of Computer Engineering, Chalmers Institute of Technology, June 2002
- Håkan Forsberg, Dept. of Computer Engineering, Chalmers Institute of Technology, Sep. 2003
- Sven Eklund, Dept. of Computer Engineering, Chalmers Institute of Technology, June 2004

#### **Administrative Tasks**

Head of PARADISlab, IT, KTH, 1995-99

Deputy Head of Department (proprefekt), IT, KTH, 1997-99

Member of the EIT Assessment Committee (Tjänsteförslagsnämnden EIT), KTH, 1996-1999.

Head of Computer Science Lab, IDt, MdH, 1999, and 2003 – present.

Member of the steering group of Mälardalen Real-Time Research Centre, from 1999.

Member of the board of ASTEC Nutek competence center in Uppsala, from 1999.

Member of the board of the KK foundation, 2000–2003.

Member of the steering board of the National Graduate School in Computer Science (CUGS), from 2001.

## **External Research Grants**

1991-93: TFR 91-333 *High Level Synthesis and Programming of Parallel Systems*, 536 kSEK annually.

1994-97: TFR 94-109 *Theory for Data Parallelism and Functional Languages*, 361 kSEK annually.

1996-97 EC TMR (Training and Mobility) programme, contract no. ERBFMBICT950113 *Design and Implementation of Data-parallel Functional Languages* (grant to host Dr. Jean-François Collard for one year), 23.360 ECU.

1997-99 *Parallelization of Data Fields*, travel grant from Svenska institutet to cooperate with Prof. Christian Lengauer at Universität Passau. 19 kSEK annually.

1998-00: TFR 97-722 *Advanced Code Generation for Parallel Computers*, 334 kSEK (298 kSEK -99 and 00, respectively).

1999-01: TFR 98-653 *Semantics and Proofs for Programming Languages*, "ramanslag" with J. Parrow (main applicant) and M. Dam, 1.22 Mkr annually.

2000-02: TFR 221-99-353 *High-Level Languages for Hard Real-Time Systems*, 370 kkr annually.

2000: ASTEC (Nutek-supported competence center) *Worst-Case Execution Time Analysis* (with Hans Hansson), 200 kkr

2001: Volvo Research Foundation *Domain-dependent Aspects of Learning Quality in Evolutionary Algorithms* (with Jacek Malec), 350 kkr

2001-03: ASTEC Worst-Case Execution Time Analysis (with Jan Gustafsson), 555 kkr 2001, 572 kkr 2002, 476 kkr 2003.

2002-04: VR Worst-Case Execution Time Analysis (with Jan Gustafsson), 585 kkr annually.

2002: KK-foundation Dimensional Analysis for Modeling Languages, 473 kkr.

2003: Enea Embedded Systems AB, software donation (source code for OSE real-time operating system), estimated value 550 kkr.

2004: Software donations from AbsInt Angewandte Informatik GmbH (estimated value 1310 kkr), Tidorum Oy (estimated value 90 kkr), and IAR Systems AB (estimated value 316 kkr).

2004: Ericsson AB: Parallel Execution of PLEX Programs, 483 kkr

#### **External Educational Grants**

2000: *Authorized Academic Java Campus*, collaboration with Sun Microsystems regarding Java education. The contract includes a donation with a four-processor E450 Sun Enterprise Server, four SunRay 1 thin clients, two Ultra-10 Workstations, and heavily discounted software and teaching material. Estimated value in range 400-500 kkr.

2003: KK-foundation *Nätverk för kunskapsutveckling inom Informatikens vetenskapsteori* (with Gordana Dodig-Crnkovic), 50 kkr

2004: KK-foundation *nationell kurs i informationsvetenskapernas filosofi* (with Gordana Dodig-Crnkovic), 100 kkr – 262 kkr depending on number of students (course still running at time of writing)

#### **Supervision**

I am or have been main advisor for the following graduate students in Computer Systems:

- Karl-Filip Faxén, KTH (Ph. D. June 1997, thesis title *Analysing, Transforming and Compiling Lazy Functional Programs*, Licentiate Jan. 1996, thesis title *Flow Inference, Code Generation, and Garbage Collection for Lazy Functional Languages*).
- Xavier Vera, MdH (Ph. D. Jan. 2004, thesis title *Cache and Compiler Interaction*, Licentiate March 2002, thesis title *Towards a Static Cache Analysis for Whole Program Analysis*).
- Peter Drakenberg, KTH (Ph. D. Sep. 2004, thesis title *Computatioal Structures and Language Design*, Licentiate Feb. 2001, thesis title *Hierarchical Array Tiling*).
- Claes Thornberg, KTH (Licentiate April 2000, thesis title *Towards Polymorphic Type Inference with Elemental Function Overloading*).
- Thomas Larsson, MdH (Licentiate Sep. 2003, thesis title *Adaptive Algorithms for Collision Detection and Ray Tracing of Deformable Meshes*).
- Baran Cürüclü, MdH (Licentiate Dec. 2003, thesis title *Layout and Function of the Intracortical Connections within the Primary Visual Cortex*).

- Markus Bohlin, MdH (Licentiate April 2004, thesis title *Design and Implementation of a Graph-Based Constraint Model for Local Search*).
- Jan Carlson, MdH (Licentiate June 2004, thesis title *An Intuitive and Resource-Efficient Event Detection Algebra*).
- Fredrik Lundevall, KTH
- Nerina Bermudo, MdH
- Waldemar Kocjan, MdH
- Mikael Sandberg, MdH
- Roger Jonsson, MdH
- Gordana Dodig-Crnkovic, MdH

I also help or have helped out, as second advisor or on an informal basis, to advise the following graduate students: Csaba Andras Moritz (Computer Systems KTH, main advisor Lars-Erik Thorelli, Ph. D. Sep. 1998, thesis title Cost Modeling and Analysis: Towards Optimal Resource Utilization in Parallel Computer Systems), Christian Wettergren (Teleinformatics KTH, main advisor Prof. G. Q. Maguire), Waseem G. Besada (Teleinformatics KTH, main advisor Prof. G. Q. Maguire), Reza Emdad (Teleinformatics KTH, main advisor Prof. J. Parrow), Per Hammarlund (Computer Science KTH, main advisor Prof. J.-O. Eklundh), Ph. D. June 1996, thesis title Techniques for Efficient Parallel Scientific Computing, Joacim Halén (Computer Science KTH, main advisor Prof. S. Arnborg), Olof Johansson (Computer Science Umeå University, main advisor Prof. P. Eklund, Lic. April 1995, thesis title A Functional Language for Microcomputers), Christina Björkman (Computer Science Education, University College Karlskrona-Ronneby, main advisor Prof. Lena Trojer, Lic. June 2002, thesis title Challenging Canon: The Gender Question in Computer Science), Johan Larsson, (NADA/KTH, main advisor Ass. Prof. Karl Meinke), Filip Sebek (IDt/MdH, main advisor Prof. Lennart Lindh, Lic. Oct. 2002, thesis title Instruction Cache Memory Issues in Real-Time Systems), Frank Lüders (IDt/MdH, main advisor Prof. Ivica Crnkovic, Lic. Dec. 2003, thesis title Use of Component-Based Software Architectures in Industrial Control Systems), Andreas Sjögren (IDt/MdH, main advisor Prof. Ivica Crnkovic), Mikael Sollenborn (IDt/MdH, main advisor Assoc. Prof. Peter Funk), Markus Nilsson (IDt/MdH, main advisor Assoc. Prof. Peter Funk), Lic. Apr. 2003, thesis title A Case-Based Approach for Classification of Physiological Time-Series).

I have supervised, or examined, around 35 M. Sc. theses on various topics in Computer Engineering and Computer Science.

# **Journal Publications**

- 1 Synthesis and equivalence of concurrent systems. *Theoret. Comput. Sci.*, 58:183–199, 1988. Short version in Proc. 13th International Colloquium on Automata, Languages and Programming, pages 226–235, Rennes, France, July 1986.
- 2 The Interactive Space-Time Scheduler. *Microprocessing and Microprogramming*, 30(1–5):109–116, Aug. 1990.
- 3 Synthesis of time-optimal systolic arrays with cells with inner structure. *J. Parallel Distrib. Comput.*, 10(2):182–187, Oct. 1990.
- **4** Computing transitive closure on systolic arrays of fixed size. *Distrib. Comput.*, 5(3):133–144, Dec. 1991.

- 5 Total unfolding: Theory and applications. *J. Functional Programming*, 4(4):479–498, Oct. 1994.
- 6 Preconditioning index set transformations for time-optimal affine scheduling. *Algorithmica*, 15:193–203, 1996. Preliminary version in *Proc. 2nd Ann. Symp. on Parallel Algorithms and Architectures*, pages 360–366, Crete, July 1990.
- 7 Computing in unpredictable environments: Semantics, reduction strategies, and program transformations. *Theoret. Comput. Sci.*, 190(1):61–85, Jan. 1998. Short version in *Proc. Colloquium on Trees in Algebra and Programming*, pp. 165–179, April 1996.

### **Books and Book Contributions**

- **8** Synthesis of Synchronous Systems by Static Scheduling in Space-Time, volume 362 of Lecture Notes in Comput. Sci. Springer-Verlag, Heidelberg, May 1989. (Ph. D. thesis).
- 9 Affine permutations of matrices on mesh-connected arrays. In M. A. Bayoumi, editor, Parallel Algorithms and Architectures for DSP Applications, pages 129–158. Kluwer Academic Publishers, 1991. (With S. V. Rajopadhye.)
- 10 Data parallelism and functional programming. In G.-R. Perrin and A. Darte, editors, The Data Parallel Programming Model: Foundations, HPF Realization, and Scientific Applications, Vol. 1132 of Lecture Notes in Comput. Sci., pages 220–251, Les Ménuires, France, Mar. 1996. Springer-Verlag.

## **Reviewed Conference and Workshop Publications**

- 11 Single assignment semantics for imperative programs. In E. Odjik, M. Rem, and J.-C. Syre, editors, *Proc. PARLE'89 vol. II: Parallel Languages*, pages 321–334, Berlin, June 1989. Volume 366 of *Lecture Notes in Comput. Sci.*, Springer-Verlag.
- 12 Matrix permutations on mesh-connected arrays. In *International Symposium on Circuits and Systems*, pages 2626–2629, New Orleans, LA, May 1990. IEEE CaS Society. (With S. V. Rajopadhye.)
- 13 Detecting static algorithms by partial evaluation. In *Proc. ACM SIGPLAN Symposium* on *Partial Evaluation and Semantics Based Program Manipulation*, pages 31–42, June 1991.
- 14 Reasoning about permutations in regular arrays. In J. Staunstrup and R. Sharp, editors, *Proc. IFIP WG 10.5 & 10.2 2nd Workshop on Designing Correct Circuits*, IFIP Transactions A-5, pages 139–157, Amsterdam, Jan. 1992. ElsevierScience Publishers B.V. (North-Holland). (With S. V. Rajopadhye.)
- 15 On the relation between functional and data parallel programming languages. In *Proc.*Sixth Conference on Functional Programming Languages and Computer Architecture, pages 210–222. ACM Press, June 1993. (With P. Hammarlund.)
- 16 Extent analysis of data fields. In B. Le Charlier, editor, *Proc. International Symposium on Static Analysis*, Vol. 864 of *Lecture Notes in Comput. Sci.*, pages 208–222, Namur, Sept. 1994. Springer-Verlag. (With J.-F. Collard.)
- 17 Development of parallel algorithms in Data Field Haskell. In A. Bode, T. Ludwig, W. Karl, and R. Weismüller, editors, *Proc. Euro-Par 2000*, volume 1900 of *Lecture Notes in Comput. Sci.*, pages 762–766, Munich, Germany, Aug. 2000. Springer-Verlag. (With J. Holmerin.)

- 18 Development and verification of parallel algorithms in the data field model. In S. Gorlatch and C. Lengauer, editors, *Proc. 2nd Int. Workshop on Constructive Methods for Parallel Programming*, pages 115–130, Ponte de Lima, Portugal, July 2000. (With J. Holmerin.)
- **19** Data Field Haskell. In G. Hutton, editor, *Proc. Fourth Haskell Workshop*, pages 106–117, Montreal, Canada, Sept. 2000. (With J. Holmerin.)
- **20** An efficient semi-hierarchical array layout. In *Workshop on Interaction between Compilers and Computer Architectures*, Monterrey, Mexico, January 2001. Kluwer. (With N. P. Drakenberg and F. Lundevall.)
- 21 Worst-case execution time analysis of disable interrupt regions in a commercial realtime operating system. In P. Pettersson and W. Yi, editors, *Proc. Workshop on Real-Time Tools*, Copenhagen, Aug. 2002. (With M. Carlsson, J. Engblom, A. Ermedahl, and J. Lindblad.)
- **22** A tool for automatic flow analysis of C-programs for WCET calculation. In B. Werner, editor, *Proc. Eight IEEE International Workshop on Object-Oriented Real-Time Dependable Systems*, Cancun, Jan. 2003. IEEE. (With J. Gustafsson, C. Sandberg, and N. Bermudo.)
- 23 Data cache locking for higher program predictability. In *Proc. International Conference on Measurement and Modeling of Computer Systems (SIGMETRICS)*, pages 272–282, San Diego, CA, June 2003. ACM Press. (With X. Vera and J. Xue.)
- 24 An interval-based algebra for restricted event detection. In *Proc. First International Workshop on Formal Modeling and Analysis of Timed Systems (FORMATS 2003)*, Marseille, Sept. 2003. (With J. Carlson.)
- **25** Automatic dimensional consistency checking for simulation specifications. In E. Dahlqvist, editor, *Proc. SIMS 2003*, Västerås, Sept. 2003. (With M. Sandberg and D. Persson.)
- **26** Input-dependency analysis for hard real-time software. In L. Bacellar and G. Fohler, editors, *Proc. Ninth IEEE International Workshop on Object-oriented Real-time Dependable Systems*, Capri Island, Oct. 2003. IEEE. (With J. Gustafsson and P. Puschner.)
- 27 Data caches in multitasking hard real-time systems. In *Proc. International Real-Time Systems Symposium (RTSS)*, Cancun, MX, Dec. 2003. IEEE. (With X. Vera and J. Xue.)
- **28** An event detection algebra for reactive systems. In *Proc. Fourth ACM International Conference on Embedded Software (EMSOFT'04)*, Pisa, Sep. 2004. (With J. Carlson.)
- 29 Static timing analysis of real-time operating system code. In *Proc. 1st International Symposium on Leveraging Applications of Formal Methods* (ISoLA-04), Paphos, Cyprus, Oct. 2004. (With D. Sandell, A. Ermedahl, and J. Gustafsson)

# **Workshop Papers**

- **30** Linear programming methods for minimizing execution time of indexed computations. In *Proc. Int. Workshop on Compilers for Parallel Computers*, pages 131–142, Dec. 1990.
- **31** Data fields. In *Proc. International Workshop on Generic Programming*, Marstrand, Sweden, June 1998.

- 32 Elemental function overloading in explicitly typed languages. In M. Mohnen and P. Koopman, editors, *Proc. 12th International Workshop of Implementation of Functional Languages*, pages 31–46, Aachen, Germany, Sept. 2000. (With C. Thornberg.)
- **33** Dimensional analysis for Modelica. In *Proc. Modelica Workshop 2000*, Lund, Oct. 2000. (With M. Sandberg.)
- 34 Response-time calculation and priority assignment with integer programming methods. In E. Tovar and C. Norström, editors, *Proc. Work-in-progress and Industrial Sessions, 13th Euromicro Conference on Real-Time Systems*, pages 13–16. TU Delft, June 2001. (With P. Mellgren.)
- 35 A tool concept for execution time analysis of legacy systems. In *Proc. Work-in-progress* and *Industrial Sessions, 14th Euromicro Conference on Real-Time System,* Vienna, June 2002. (With J. Erikson, P. Funk, and J. Gustafsson.)
- **36** A prototype tool for flow analysis of C programs. In G. Bernat, editor, *Proc. WCET 2002 Workshop*, Vienna, June 2002. (With N. Bermudo, J. Gustafsson, C. Sandberg, and L. Sjöberg.)
- 37 Haxcel: A spreadsheet interface to Haskell. In *Proc. 14th International Workshop of Implementation of Functional Languages*, Madrid, Sept. 2002. (With J. Malmström.)
- **38** Fully automatic, parametric worst-case execution time analysis. In J. Gustafsson, editor, *Proc. Third International Workshop on Worst-Case Execution Time (WCET) Analysis*, pages 77–80, Porto, July 2003.

## **Research Reports**

- **39** Systolic arrays. Tech. Rep. TRITA-NA-8315, Dept. of Numerical Analysis and Computer Science, KTH, Stockholm, 1983. (With E. Tidén and R. Schreiber.)
- **40** Explicit routing in the Fluent Machine. Tech. Rep. YALEU/DCS/TR-645, Dept. Comput. Sci., Yale University, Aug. 1988.
- **41** Formal derivation of concurrent assignments from scheduled single assignments. Res. Rep. R91:15, Swedish Institute of Computer Science, Oct. 1991.
- **42** Data parallel programming a survey and a proposal for a new model. Technical Report TRITA-IT R 93:08, Dept. of Teleinformatics, KTH, Stockholm, Sept. 1993. (With P. Hammarlund.)
- 43 An experimental implementation of a highly abstract model of data parallel programming. Technical Report TRITA-IT R 97:02, Dept. of Teleinformatics, KTH, Stockholm, Mar. 1997. (With J. Halén and P. Hammarlund.)
- 44 The Data Field Model. Technical Report TRITA-IT R 99:02, Dept. of Teleinformatics, KTH, Stockholm, Mar. 1999. (With P. Hammarlund. Revised version 2001, Dept. of Computer Engineering, MdH.)
- **45** Fully automatic, parametric worst-case execution time analysis. MRTC report, Dept. of Computer Science and Engineering, Mälardalen University, Apr. 2003. (Long version of WCET Workshop paper with same title.)

Note: Conference/workshop papers and research reports are listed only if not subsumed by later publications.