

## CURRICULUM VITAE

Anders Haraldsson, born 12 Dec 1946 (pnr 461212-0032)

### Present affiliation:

Institutionen för datavetenskap, Linköpings universitet  
Department of Computer and Information Science, Linköping University, Sweden

### Education:

1965 Studentexamen, Lundellska läroverket, Uppsala  
1969 B.Sc in Mathematics and Computer Science, Uppsala University, Sweden  
1977 Ph.D in Computer Science, Linköping University, Sweden

### Employment:

1969 Lecturer (part-time universitetslektor) in Computer Science, Umeå University

1969-1975 Research Assistant and Lecturer in Computer Science, Datalogilaboratoriet, Uppsala University

1976 Research Assistant, Computer Science, Linköping University

1977-1993 Senior lecturer and Associate Professor (universitetslektor) in Computer Science, Linköping University

since 1993 Associate Professor (biträdande professor), Linköping University

Sept 2012 Retired.

1983-1989 Director of undergraduate studies (studierektor) in the subjects Computer Science and Computer Systems the Department of Computer and Information Science.

1990-1999 Department chairman (prefekt), Department of Computer and Information Science

2000-2006 Head of the program board for the Computer science and engineering curricula (utbildningsnämnden för D) with responsibility for D-programme (120-150 students), C-programme (30-60 students) and the IT-programme (30 students)

2007-2008 Head of program board for Computer and Media Technology (programnämnden för Data- och medieteknik) with responsibility to approx 15 programmes in that area, including 3 "civilingenjörs" programmes, 2 "ingenjörs" programmes, 4 master programmes, and 4 bachelor (candidate) programmes.

## Research:

- 1970-1975 Research in artificial intelligence: The PILS project: implementing INTERLISP on a Siemens computer. The PCDB-project: transforming predicate calculus formulas to LISP programs for maintaining data bases. Program manipulation in the REDFUN-project with partial evaluation. AI-languages: Study of QLISP.
- 1974 Organizer of a summer school "Datalogi, med inriktning små databaser", Nordiska forskarkurser.
- 1974-1982 Project leader for the *Program transformation project*, with partial evaluation and implementation of the REDFUN system. Supported by TFR (Tekniska Forskningsrådet). Supervisor of two Ph.D. Thesis's (Pär Emanuelson and Jan Komorowski).
- 1982-1987 In the PELAB (Programming Environment Laboratory) research group, programming environments.
- 1987-1993 In the LOGPRO (Logic Programming Laboratory) research group. Research in program transformation and partial evaluation. Project leader for the STUF-projects "Systematic Design of Abstract Machines through Partial Evaluation" and "Systematic Design of Logic Programs using Partial Deduction (NUTEK 9000472, 1990-1992)". Supervisor for part of one Ph.D. Thesis (Ulf Nilsson).
- 1987 Program committee for the workshop on Partial evaluation and Mixed computation, Gamle Aeverness, Denmark, Oct 1987.
- 1988 Guest editor of New Generation Computing, special issue on Partial Evaluation and Mixed Computation, 1988.
- 1990 Program committee for the workshop on Partial deduction, evaluation and intelligent reasoning, ECCAI, Stockholm, Aug 1990.
- 1991 Program committee for the workshop on Symposium on Partial Evaluation. and Semantics-Based Program Manipulation, New Haven, Jun 1991.
- 1993-1994 In the IISLAB (Intelligent Information System Laboratory) research group. Acting as laboratory leader during Lin Padgham sabbatical year in Melbourne.
- 1997-2001 DLK-project. *It-baserat lokalt fackligt kunskspastöd* tillsammans med LO (IT-based local knowledge supprt for the LO union organisation). Member of reference group.
- since 1999 In the AIICS-division and leader of the EIT group (Education in Information Technology Group). E-learning activities with participations in European projects. Software Renaissance Group studying design of programming languages and environments focusing on integration and extensible languages. Supervisor for a licentiate thesis (Björn Häggglund)

## **Teaching:**

### At Umeå and Uppsala universities, 1969-1975

Numerical analysis and programming in Fortran  
Data processing  
Lisp programming  
COBOL programming  
Algol programming  
Applied logics  
Artificial intelligence  
Symbol and formula manipulation  
Data structures and program development

### At KTH (Royal Institute of Technology), Stockholm, 1973

Lisp programming

### At Linköping university, 1976-

Programming and Program development project in Pascal, D1  
Programming II, I3  
Programming Y, Y2  
Programming i Pascal, biologlinjen  
Methodology of program development, D2  
Fortran, D3  
Artificial intelligence and symbol manipulation, D4  
Data- and program structures, D3, D4, IT4, C2  
Programming in incremental system, D1, C1  
Programming theory, C3  
Programming in Lisp, SVL3  
Programming in Ada, D4, C4  
Programming in Ada, single subject course, Linköping and Norrköping  
Programming languages, D4, C4, 1985 (parts: Algol, PL/I, Simula, Algol 68, Pascal, Ada)  
Methodology of program development and Programming project, C3  
Programming, Cognitive Science, KVP1  
Introduction to Computer Science (part computer languages, functional programming and Scheme), IT1 (problem base learning)  
Programming and Computer languages, C1  
Programming, D1  
Artificial intelligence and Lisp (part of Lisp), DI3, I4  
Actual programming languages, NM4, NE4, NK4, Campus Norrköping  
Perspectives to computer technology, D1  
Programming, Lisp and functional programming, C1  
Perspectives to computer science, C1  
Computer Systems and Programming, C1, D1  
Functional programming and Lisp, C1, D1  
Project: Computer languages, IP1  
Programming, abstraction and modelling, Y1

### At Blekinge Institute of Technology, 2001

Programming Paradigm

### Continued education courses for industry, 1985-1995

Structure and interpretation of computer programs, Ericsson

Principles of programming languages, Ericsson

Data structures, Ericsson

Programming in Lisp, Ericsson, Asea, Volvo

Programming in Ada, Saab

Programming Paradigms, Ericsson Radio System

### Ph-D courses

Programming Languages (1979 with Algol, PL/I, Algol 68)

Program Transformation

Formal methods (parts on program transformations)

High-level notions of computations and programming language concepts, 2005

Concepts, Techniques, and Models of Computer Programming, 2006

### **Other activities:**

- 1977-1986 Member of the group developing the D-line (Computer Science and Engineering) at Linköpings Institute of Technology and responsible for developing the C-line (Computer Science) at Linköpings Institute of Technology.
- 1982-1990 Chairman of the board for undergraduate teaching (*IDUN - IDA's undervisningsnämnd*)
- 1987 - 2006 Member of Programme board för the Computer Science and Technology Curriculum and the Computer Science Curriculum (*Linjenämnd för datateknik*) at Linköpings universitet. Head of the board since 2000.
- 1990 -1999 Member of the University's group for equality (*LiU's jämställdhetsgrupp*).
- 1997-2004 Member of the board for Graduate School for Applied IT and Software Engineering (*Företagsforskar skola för Tillämpad IT och programvaruteknik*) at Department of Computer and Information Science.
- 2000-2001 Participating in the Career and Space, Generic Skills project and member of the Curriculum Development Guidelines Working Group.  
See further: <http://www.career-space.com/>
- 2000-2006 Member of board for *Centrum för Människa, Teknik och Samhälle* (CMTS).
- 2001-2001 Participating in PanEuropean Information Communications Technology Curriculum Project, supported by Department of Trade and Industry (DTI), Great Britain.
- 2001 - 2002 Project leader for a gender project in which students from computer and electrical engineering programs and teaching programs are both educated in gender knowledge and investigates their programs from a gender perspective. See further publication.

- 2002-2004 EU-project in the eLEARNING INITIATIVE. GENIUS - Generic E-Learning environments and paradigms for the new pan european information and communication technologies curricula.
- 2002-2003 Member of Högskoleverkets (National Agency for Higher Education) group for evaluation of *Högskoleingenjörutbildningar* in Sweden. Responsible for evaluating programs in the area Computer technology (*Datateknik*).
- 2003 In steering committee for a VIQ/Teknikföretagen-project "Concept for education in Software Engineering" (*Koncept för utbildning i Industriell Programvaruutveckling*). VIQ - VerkstadsIndustriernas Råd för Kvalitetsutveckling / Teknikföretagen
- 2004-2008 In advisory board for "gymnasieprogrammet ITKL", Berzeliussskolan.
- 2007-2008 Head of Programme board for the Computer and Media Technology (*Programnämnd för data- och medieteknik*) at Linköpings universitet.
- 2007 Member of Högskoleverkets (National Agency for Higher Education) group for evaluation of *Prövning av masterexamensrätt* in Sweden. Responsible for evaluating programs at Halmstad, Skövde and Jönköping. Rapport 2007:46 R.
- 2007-2008 In subgroup for *samordningsgrupp VÄLJ-IT*. Discussion classification of Swedish IT-programs. ACM's classification Computing Curricula.
- 2008 Member of Högskoleverkets (National Agency for Higher Education) group for evaluation of *Prövning av masterexamensrätt* in Sweden. Responsible for evaluating programs at Borås.
- 2009-2011 Member of the Appointment Board of the Institute of Technology (*LiTH's anställningsnämnd*).
- 2011-2012 Member in advisory group for gender project at KTH. Representant for LiTH *FOTH Från ord till handling*.
- 2012-2013 Member of Högskoleverkets (National Agency for Higher Education) group for evaluation of education in *Ingenjör och teknikvetenskapliga utbildningar* (Engineering and Technical programmes). Head of evaluation board for programmes in *Data, IT och Medieteknik* (Computer engineering, IT and Media Technology).

## **Publications:**

A Haraldsson, *PCDB - A procedure generator for a predicate calculus data base*, Information Processing 74, North-Holland Publishing Company, 1974

L Beckman, A Haraldsson, Ö Oskarsson, E Sandewall, *A Partial Evaluator, and its Use as a Programming Tool*, Artificial Intelligence Journal 7, 1976

A Haraldsson, *A Program Manipulation based on Partial Evaluation*, Ph D Thesis, Linköping University, 1977

A Haraldsson, *A Partial Evaluator and its use for compiling iterative statements in LISP*, Fifth Annual Symposium in Principles of Programming Languages POPL-5, Tucson, 1978

P Emanuelson, A Haraldsson, *On compiling embedded languages in LISP*, LISP Conference, Stanford, 1980

A Haraldsson, *INTERLISP - en avancerad integrerad programmeringsomgivning*, Nord-Data, Göteborg 1982

Madelaine Engström, Anders Haraldsson, Tove Mattsson, Minna Salminen-Karlsson, *Studenter genusgranskar sin utbildning - Projekt med elektro- och dataprogrammen och lärarutbildningen vid Linköpings universitet*, CUL-rapport nr 5, Linköping University, 2003

P Dalenius, O Leifler, A Haraldsson, *Discussing Programming Assignments in a Virtual Learning Environment*, Springer Verlag (to be published spring 2005)

Björn Hägglund, Anders Haraldsson, *The Art and Virtue of Symbolic Constraint Propagation*, CP 2006 Twelfth International Conference on Principles and Practice of Constraint Programming, 2006

Björn Hägglund, Anders Haraldsson, *Building Tables for Multiple Dispatch Using Multidimensional Poles*, submitted to some conference?

## **Published books:**

A Haraldsson, *LISP details / INTERLISP 360-370*, 1st and 2nd edition, Datalogilaboratoriet, Uppsala, 1975, 1978

A Haraldsson, *LISP details / INTERLISP*, 3rd edition, Daten, Linköping, 1981

A Haraldsson, *Programmering i Pascal*, Studentlitteratur, 1978, 1985. Sold more than 50.000 books.

A Haraldsson ved Skov Jensen, *Programmering i Pascal* (Danish translation), Teknisk Förlag, Köpenhamn 1983. Sold more than 25.000 books.

A Haraldsson, *PASCAL-kielen oppikirja* (Finish translation), Studentlitteratur/Oy Rastor Ab, 1988

A Haraldsson, *Programmering i LISP*, Studentlitteratur, 1993, 1997

### **Reports, articles, program documentation etc:**

A Haraldsson, *Ett svenskt frågebesvarande program för släktskapsrelationer*, kandidatuppsats, Report nr 20, Computer Science Department, Uppsala University, 1969

A Haraldsson, E. Sandewall, J. Urmi. *Arbetsplan för PILS/370*. Datalogilaboratoriet, Inst för informationsbehandling, Uppsala universitet, 1971

E Sandewall, A. Haraldsson, A. Tengvald, *Documentation of the REDFUN package*, Datalogilaboratoriet, Inst för informationsbehandling, Uppsala Universitet. 1971

A Haraldsson, *Dokumentation av PULI*, Datalogilaboratoriet, Inst för informationsbehandling, Uppsala Universitet. 1972

S. Hägglund, A. Haraldsson, *Användar-interface för IS/1 med Naturvårdverkets data*, Datalogilaboratoriet, Inst för informationsbehandling, Uppsala Universitet. 1973

A Haraldsson, *CS2L - lagring och utsökning av trippler (binära relationer) i en liten databas*, DLU 73/8. Datalogilaboratoriet, Inst för informationsbehandling, Uppsala Universitet. 1973

A Haraldsson, E. Sandewall, *PCDB - System documentation Part I*. DLU 73/9. Datalogilaboratoriet, Inst för informationsbehandling, Uppsala Universitet. 1973

A Haraldsson, *PCDB - A procedure generator for a predicate calculus data base*, DLU 73/23. Datalogilaboratoriet, Inst för informationsbehandling, Uppsala Universitet. 1973

A Haraldsson, *LISP - details*, DLU 74/14, Datalogilaboratoriet, Inst för informationsbehandling, Uppsala Universitet. 1973

A Haraldsson, *Short PCDB Guide*, DLU 74/17. Datalogilaboratoriet, Inst för informationsbehandling, Uppsala Universitet. 1974

L Beckman, A Haraldsson, Ö Oskarsson, E Sandewall, *A Partial Evaluator, and its Use as a Programming Tool*, DLU 74/34. Datalogilaboratoriet, Inst för informationsbehandling, Uppsala Universitet. 1974

A Haraldsson, *LISP details / INTERLISP*, 1st edition 1975, DLU 75/9, Datalogilaboratoriet, Inst för informationsbehandling, Uppsala Universitet. 1975

A Haraldsson, *Programmanipulation och programgenerering*, Datadagen, Tekniska Högskolan i Linköping, 1979

A Haraldsson, *Experiences from a Program Manipulation System*, LiTH-MAT-R-80-24, Software Systems Research Center, Linköping University, 1980

A Haraldsson, *The Program Manipulation Project 1976-1981*, Progress Report, Software Systems Research Center, Linköping University, 1981

A Haraldsson, *INTERLISP - en avancerad integrerad programmeringsomgivning för LISP-språket*, Datalogicentrum, Tekniska Högskolan i Linköping, LiTH-MAT-R-82-29, 1982

A Haraldsson, I Ingemarsson, *Datautbildningen i Sverige - grund- och vidareutbildningen*, Tekniska Träffen, Linköping, 1985

A Haraldsson, *LISP som första språk*, Nordisk DATANytt 17/86, 1986

A Haraldsson, *Aktuell datautbildning i Sverige - en översikt*, UHÄ konferens "Universitetets roll vid datautbildningar", Kolmården, 1986

A. Haraldsson, uppslagsordet *Lisp*, Nationalencyklopedien, 1993

### **Course material, educational articles etc:**

A Haraldsson, *Studiematerial i LISP*, Datalogilaboratoriet, Inst för informationsbehandling, Uppsala Universitet. 1971

A Haraldsson, *Sorteringsmetoder*, Inst för informationsbehandling, Uppsala Universitet. 1972

A Haraldsson, *DEC-10 Monitorkommandon*, Datalogi, Tekniska Högskolan i Linköping, 1978

A Haraldsson, *Utredning angående datalogikurser på D-linjen*, Datalogi, Tekniska Högskolan i Linköping, 1978

A Haraldsson, M. Nordström, *Utbildningsprogram för vidareutbildning av programmerare*, Philips elektronikindustrier AB, 1983

A Haraldsson, M. Nordström, *Utbildningsprogram för programutveckling med Ada*, Philips elektronikindustrier AB, 1983

A Haraldsson, *Förslag kursplan i datalogi (teknisk ADB)*, Oktagonen-gruppen, 1984

A Haraldsson, *Programmering i Lisp*, a number of versions for INTERLISP and Common Lisp, course material, Linköping University, 1985-1992

A Haraldsson, *Kursmaterial i PINK*, a number of versions for INTERLISP and Common Lisp, course material, Linköping University, 1985-1999

A Haraldsson, *Kursmaterial i programmering*, for the cognitive science curriculum, 1994-1995.

A Haraldsson, P Dalenius, *Kursmaterial i Funktionell programmering och Lisp*, a number of versions for Common Lisp, course material, Linköping University, 1999-2011



### **Invited talks (since 2004 and in Swedish)**

Teknikföretagen, Seminarium i Industriell Programvaruutveckling, Saab, Linköping 25 mars 2004, *Hur fungerar utbildningen på högskolorna idag och hur skall de närma sig industrin?*

Ämneskonferens i datavetenskap, Skövde 14 juni 2004, Invited speaker, *Historik, Ämnet, Yrkesroller, Dagsläget.*

Nätverksträff D och IT, Lund 13-14 June 2011. *Inledande programmering i Lisp/Scheme vid LiU.*

Seminar SAS-divisidion, IDA, 3 Feb, 2012. Research in *Partial evaluation.*

### **Supervision and examination committees:**

#### Supervisor for the following Ph.D. Thesis's:

Pär Emanuelson, *Performance Enhancement in a Well-structured Pattern Matcher Through Partial Evaluation*, 1980

Jan Komorowski, *A Specification of an Abstract Prolog Machine and its Application to Partial Evaluation*, 1981

#### Supervisor for the following Licentiate Thesis:

Björn Hägglund, *A Framework för Designing Constraint Stores*, 2007

#### In supervisory committees for the following Ph.D.Thesises:

Tony Larsson, 1989

Henrik Eriksson, 1991

Kristian Sandahl, 1992

Ulf Nilsson. 1992

Andreas Kågedal, 1995

Matthias Broxvall, 2002

Johan Moe, 2003

#### In supervisory committees for the following Lic. Thesis's:

Mats Larsson, 1993

Ulf Cederling, 1993

Eva Toller, 1995

Nicklas Wahllöf, 1997

Johan Moe, 2001

#### In examination committees for Ph.D. defence:

Johan Boye, Linköping, 1996

Göran Forslund, Linköping, 1997

Johan Jenvald, Linköping, 1999

Mikael Kindborg, Linköping 2003

Examiner/supervisor for Bachelor Thesis's (since 2000) some of them:

Andreas Ekbohm, *Studium av Othello - Design, algoritmer och implementation*, LiTH-IDA-Ex-Ing-04/13, 2004

Simon Ståhlberg, *Implementation och utökning av en typhärledningsalgoritm för Common Lisp*, LIU-IDA/LITH-EX-G--10/018--SE, 2010

Alexander Binggeli, *Partialevaluering - Specialisering av program. Utformning av laboration*, LIU-IDA/LITH-EX-G--11/030--SE, 2011

Examiner for Master Thesis's (since 2000):

Daniel Persson, *CityServer - Ett system för filtrering och distribution av HTML-sidor*, LiTH-IDA-Ex-00/33, 2000

Anders Gulliksson, *Vägledning vid val av programspråk*, LiTH-IDA-Ex-00/3, 2000

Per Einarsson, *Utveckling av en syntaxkänslig editor för servicematriser som används för konfigurering av Telia MobilSvar*, LiTH-IDA-Ex-00/70, 2000

Björn Hägglund, *Design av ett anpassningsbart programspråk*, LiTH-IDA-Ex-02/49, 2002

Robert Wensman, *The Microeditor Framework - an Approach to Efficient Editing of Programs*, LiTH-IDA-Ex-02/48, 2002

Stefan Niccolai, *Peer-to-peer networking with Gnutella*, LiTH-IDA-Ex-02/103, 2002

Magnus Johansson, *Performance of Distributed Simulation based on the Principles of the High Level Architecture*, LiTH-IDA-Ex-03/23, 2003

Johan Castevall, Dan Eding, *Business Activity Monitoring - design och implementation av en regelstyrd prototyp med J2EE och XML*, LiTH-IDA-Ex-03/49, 2003

Marta Pérez, *Radiofrekvensidentifiering, RFID. Teknik och användning*, LiTH-IDA-Ex-04/76, 2003

Johannes Holmberg, *Analysis of a multiple dispatch algorithm*, LiTH-IDA-Ex-04/18, 2004

Per Ivar Jannok, *Enterprise Service Bus som mjukvaruplattform för ett distribuerat bokningssystem*, LiTH-IDA-Ex-04/23, 2004

Andreas Ekbohm, *Performance Enhancements to Achieve a Top Level Othello Program*, LITH-IDA-Ex-D10--05/001

Johan Holmquist, *Formalisation of edit operations for structure editors*, LiTH-IDA-Ex 05/015 2005

Olov Johansson, *Describing Live Programming using program transformations with a JavaScript interpreter*, LiTH-IDA-Ex-06/045, 2006

Mårten Wikström, *Design av ett objektorienterat lager*, LiTH-IDA-Ex 06/74, 2006

Arthur Carlsson, *Integration av AJAX i ramverket JDP*, LiTH-IDA-Ex 08/005, 2008

Åsa Wihlborg, *Using an XML-driven approach to create tools for program understanding - AN implementation for Configura and CET Designer*, LiU-IDA/LITH-EX-A--10/017--SE, 2010

### **Commissions (sakkunnig) at other universities:**

#### Evaluation of university positions:

*Junior lecture (universitetsadjunkt) positions at:*  
Karlstad

*Senior lecture (universitetslektor) positions at:*  
Lund, Halmstad, Kristianstad, Uppsala, Chalmers, Göteborg, Karlstad, Umeå

#### Evaluation of Undergraduate Programs:

Evaluation of the D-programme at Chalmers, 2001

Evaluation of Högskoleingenjörsutbildningar in Sweden for Högskoleverket (National Agency for Higher Education), 2002-2004

Evaluation of Prövning av masterexamensrätt for Högskoleverket (National Agency for Higher Education), 2007 and 2008

Evaluation of Data, IT och Medieteknikutbildningar för Högskoleverket (National Agency for Higher Education), 2012-2013

### **Grants and awards:**

1970 Participant in "Foreign Student Summer Training Program", IBM World Trade Corporation, 10 weeks, work at IBM Scientific Center, Cambridge, 1970.

1991 MEC-prize. The Micro-Electronics Centre Award on a teacher of distinction (*Årets lärare*) within the area of computing and electronics.

2004 Nomination as *Bästa pedagog 2004* from Computer Science Programme (C-programmet) for LiTH's "Gyllene moroten".

2012 Nomination as *Bästa pedagog 2012* from Computer Science Programme (C-programmet) for LiTH's "Gyllene moroten".

### **WWW-page:**

<http://www.ida.liu.se/~andha/>