

Curriculum Vitae Brevis – Peter Fritzson, April 2020

1. General Birth: October 20, 1952, Sävsjö, Sweden. Sex: male
Address: Department of Computer and Information Science, Linköping University, 58183 Linköping.

2. Doctoral degree

1984. March. Ph.D. in Computer Science, Linköping University. Area: Computer Science.
Thesis: Towards a Distributed Programming Environment Based on Incremental Compilation.
Supervisors: Erik Sandewall and Bengt Lennartsson.

3. Relevant postdoctoral work

No postdoctoral work in the traditional sense. However an industry position:
1985-86 Project leader subproject incremental compilation, Sun Microsystems, Mountain View, California 1.5 yrs.

4. Qualification as Associate Professor and Docent

1989 Associate Professor and Director of the Programming Environment Laboratory
(PELAB), Department of Computer and Information Science, Linköping University.
1992 Docent at Linköping University.

5. Current position, period of appointment

1995-2019 Full Professor (100%) at LIU, and Research Director of PELAB.
2020-present Full professor emeritus (51%) at LIU, and Research Director of PELAB.
1999-present Vice Chairman of the Modelica Association.
1998-99, 2002-2011 Chairman of the MathCore Board.
2005-2019. Director of the MODPROD Center for Model-Based Product Development at Link. Univ.
2007-present Director of the Open Source Modelica Consortium
2007-present Research leader at RISE, SICS East, St Anna Research Institute

6. Previous positions and periods of appointment

1984-85 Lecturer and Assistant Professor, Dept. of Comp. and Inf. Science, Linköping University
1985-86 Project leader at Sun Microsystems, Mountain View, California (1.5 years)
1986-89 Lecturer and Assistant Professor, Dept. of Comp. and Inf. Science, Linköping University
1989-94 Associate Professor and Director of the Programming Environment Laboratory
(PELAB), Department of Computer and Information Science, Linköping University

- Member of the Computer Science Dept's research committee (forskningnamnd) (-1998).
- Deputy member of Computer Science Dept's board from Dec 1999.
- Member of the Computer Science Dept's senior professor council (ämnesrådet) from Dec 1999.
- Member of the board for the Engineering Program Physics and Electronics (1994-2000).
- Scientific leader and member of the ECSEL-STEM Board. (1996-2001)

2002-04 Part-time president of MathCore Engineering AB, the company expanded from 1 to 10 people.
1998-2007 Chairman of SIMS (the Scandinavian Simulation Society).
2001-2007 Secretary of EuroSim (the European Simulation Society).

Entrepreneurial Activities

1982. Founder of IDATRON HB. Part-time work in own company during 1983-1999.
1985-86. Project leader at Sun Microsystems on a subproject for Incremental Compilation.
1998. Cofounder of MathCore AB. (Tools for Modeling and Simulation)
2001 Cofounder of XP Tools AB (Software refactoring tools for Java).
2002 Cofounder of MathCore Engineering AB. See www.mathcore.com.

7. Parental leave

Parental leave, 100% August 1979-December 1979; 50% Jan 1990-May 1990.

8. People awarded doctorates for whom the applicant has been the main supervisor

18 Ph.Ds: Nahid Shahmeri (1991), Mariam Kamkar (1993), Mikael Petterson (1995), Johan Ringström (1997), Henrik Nilsson (1998), Vadim Engelson (2000), Tobias Ritzau (2003), Peter Bunus (2004), Levon Saldamli (2006), Peter Aronsson (2006), Adrian Pop (2008), David Broman (2010), Wladimir Schamai (2013), Roland Samlaus (2015), Martin Sjölund (2015), Kristian Stavåker (2015), Mahder Gebremedin (2019), Anders Andersson (2019).

Conference Chairs and/or Organization, Selection

PC **chair**, org chair, editor: Proceedings of AADEBUG'93 - the 1:st International Workshop on Automated and Algorithmic Debugging, Linköping May 3-5, 1993. LNCS 749, Springer Verlag.

PC **chair** and editor: CC'94 - the 5:th International Conference on Compiler Construction, Edinburgh April 7-9, 1994. LNCS 786, Springer Verlag.

Organization **chair**: ETAPS'96, Linköping, Sweden.

PC **chair** and editor. (1995). Conf. of Parallel Programming and Applications, Linköping, May. 17-18, 1995, Published by IOS Press, Amsterdam.

PC **chair**, org chair, editor: CPC'98 – the 7:th International Workshop on Compilers for Parallel Computers, Linköping, Sweden, June 29- July 1, 1998.

PC **chair**, org. chair, editor: SIMS'99 - The 1999 Conference of the Scandinavian Simulation Society, Linköping, Sweden, October 18-19, 1999.

PC **chair**, editor: Modelica 2000 Workshop, Lund University, Lund, Sweden, October 23-24 2000.

PC **chair**, org. chair, editor: The 3rd International Modelica Conference, Linköping University, Linköping, Sweden. Nov 3-4, 2003. Program **co-chair**: ECOOP'2007 –European Conf. on Object Oriented Programming, Berlin, July 31 – Aug 2, 2007.

PC **chair**, org. chair, and ed. (co-chairs F Cellier, C Nytsch-Geusen): EOOLT'2007 – 1st Int. Workshop on Equation-based Object-Oriented Languages and Tools, with ECOOP'2007, Berlin, July 30, 2007.

PC **chair**, org. chair, and ed. (co-chairs F Cellier, David Broman): EOOLT'2009 – 2nd Int. Workshop on Equation-based Object-Oriented Languages and Tools, with ECOOP'2008, Cyprus, July, 2008.

PC **chair**, org. chair, and ed. (co-chairs Edward Lee, F Cellier, David Broman): EOOLT'2010 – 3rd Int. Workshop on Equation-based Object-Oriented Modeling Languages and Tools, with MODELS'2010, Oslo, Oct 3, 2010.

PC **chair** and ed. The 11th International Modelica Conference, Versailles, France, Sept. 21-23, 2015.

Participation in European Research Projects (21 projects, amount to PELAB in parenthesis)

GIPE II 1991-93 (3 MSEK), PREPARE 1993-96 (4 MSEK)	REALSIM, 2000-2002, (Project Coordinator) (3 MSEK)
GPMIMD II 1994 (2.5 MSEK)	EasyCOMP, 2000-2003 (3 MSEK)
Europort LINPARC-BEAST, 1994-95 (Tec coord) (1.5 MSE)	HIDOORS, 2001-2004 (2 MSEK)
Europort LINPARC-ERLANG, 1994-95 (Technical coordinator) (1.5 MSEK)	AI4EA in Marie Curie program, 2005-2007, 50 kSEK
Europort LINPARC-TRAFFIC 1994-95 (1.5 MSEK)	OPENPROD ITEA2, 2009-2012, 100 MSEK (6.8 MSEK)
Europort LINPARC-LSDYNA, 1994-95 (1.5 MSEK)	Lila, 2009-2011, (2.0 MSEK)
Europort LINPARC-FLOW3D, 1994-95 (1.5 MSEK)	MODRIO ITEA2, 2012-2015, 130 MSEK (5.5 MSEK)
VIDEOGRAPH, 1997-99 (0.7 MSEK),	PyModSimA, EU CleanSky 1, 2014-2016 (1.0 MSEK)
JOSES, 1999-2001 (2.5 MSEK)	INTO-CPS, EU, 2015-2017 (ca 6 MSEK)
	OPENCPS ITEA3, 2016-2018, (ca 5+3 MSEK)
	EMPHYSIS ITEA3, 2018-2020, (ca 5 MSEK)

Recent Swedish Projects

EXCEL graduate school, part of, approx 7 MSEK during 1997-2003. WITAS, part of, approx 6 MSEK during 1997-99.

KK Industry PhD school, part of, approx 6 MSEK during 1998-2004.

FMB: Swedish Bioinformatics Graduate School, Modeling and simulation of drug dosage, 1.1 MSEK, 2005-2008

SSF RISE – Research Center on Integrational Software Engineering, 9.0 MSEK, 2002-2007

SSF VISIMOD (1/4 of the project: 6.5 MSEK), 2002-2007. SSF HiPo, (1/4 of the project: 2.5 MSEK), 2011-2013

SSF EDOp, Model-based optimization – 6.5 MSEK total (2.5MSEK to me), 2009-2012

VR: Consistency control and debugging, equation-based. (1.8 MSEK) 2006-2008, Continuation (2.1 MSEK) 2009-2011.

Vinnova: GRIDModelica, 3.2 MSEK, 2002-2005, Safe & Secure Mod. Sim, 5.6 MSEK, 2006-2009,

Vinnova Real-time simulation RTSIM, ca 4 MSEK, 2011-2013.

Open Source Modelica Consortium, ca 0.8 MSEK per year from 2008. (2.0 MSEK total 2008-2010)1.5 MSEK 2015.

Vinnova. OPENPROD, ca 7 MSEK, 2009-2012; MODRIO ca 5 MSEK, 2012-2015; RTISIM ca 5 MSEK 2016-2018.

VR: Integrated Debugging & Requirement-Based Fault Analysis in Equation-Based Simulation Model (2.5 MSEK) 2014-2016.

Publications of Peter Fritzson Google scholar link: <https://scholar.google.com/citations?authuser=1&user=KXUHII4AAAAJ>

Author of 21 books/proceedings, 1 book draft, 45 journal papers, and 251 papers in conference proceedings or external book chapters, of which 249 are refereed, 5 are invited, and 2 are nonrefereed. A total of 317 external publications. Selected books:

- *Principles of Object Oriented Modeling and Simulation with Modelica 2.1*, 940 pp, Wiley-IEEE Press, 2004.
- *Introduction to Modeling and Simulation of Technical and Physical Systems with Modelica*. 232 pages, ISBN: 978-1-1180-1068-6, Wiley-IEEE Press, September, 2011
- Peter Fritzson. *Principles of Object Oriented Modeling and Simulation with Modelica 3.3: A Cyber-Physical Approach*. 1250 pages. ISBN 9781-118-859124, Wiley IEEE Press, 2014.