Curriculum Vitae   May 6, 2017
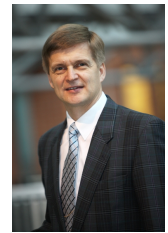
Name:	Niemelä, Ilkka Niilo Fredrik
Year of Birth:	1961
Education:	*Master of Science in Technology* (with distinction), Helsinki University of Technology, Department of Electrical Engineering, 1987.
	Licentiate of Science in Technology, Helsinki University of Technology, Faculty of Information Technology, Department of Computer Science, 1989.
	Doctor of Science in Technology, Helsinki University of Technology, Faculty of Information Technology, Department of Computer Science, 1993. Doctoral dissertation: Autoepistemic Logic as a Unified Basis for Nonmonotonic Reasoning (pass with distinction).
	Docent in Logic and its Applications in Computer Science and Engineering, Helsinki University of Technology, Department of Computer Science, 1996.
Present position:	Professor of Computer Science, Aalto University, School of Science, Department of Computer Science, 2000–
	Provost, Aalto University, May 2014–
Important positions:	Researcher, Helsinki University of Technology, Nov 1987–Jul 1988
	Research assistant, Academy of Finland, Aug 1988–May 1989
	Senior assistant, Helsinki University of Technology, Jun 1989–Dec 1997
	Junior Fellow, Academy of Finland, Aug 1992–Jul 1993
	Junior Fellow, Academy of Finland, Aug 1995–Dec 1997
	Acting Professor, Department of Computer Science and Engineering, Helsinki University of Technology, Jan 1998–Jul 1998
	Senior Fellow, Academy of Finland, Aug 1998–July 2000
	Head of the Laboratory for Theoretical Computer Science, Helsinki University of Technology, 2000–2007
	Chair of the Degree Program of Computer Science and Engineering, Aalto University, 2008–2010
	Dean, School of Science, Aalto University, Jan 2011–Feb 2012
	Deputy President, Aalto University, Mar 2012–April 2014
Visiting positions:	International Fellow, SRI International, Artificial Intelligence Center, Menlo Park, CA, USA, Feb 1993–Jul 1993
	Researcher, Fachbereich Informatik, Universität Koblenz-Landau, Germany, Jul 1995–Mar 1996
	Acting Professor, Fachbereich Informatik, Universität Koblenz-Landau, Germany, Apr 1996–Sep 1996
	Researcher, Fachbereich Informatik, Universität Koblenz-Landau, Germany, Oct 1996–Dec 1996
	Visiting Researcher, National ICT Australia, Knowledge Representation and Reasoning Program, Sydney, Australia, Dec 2005–Jan 2006
Recent Major Grants	
	One of the seven Principal Investigators of the Finnish Centre of Excellence in Computational Inference Research (COIN) 2012–2017 funded by the Academy of Finland.

Methods for Constructing and Solving Large Constraint Models (MCM) 2008-2011 (10 person years (py)) from the Academy of Finland.

Symbolic Testing and Model Checking of Distributed Embedded Systems (StMcDes) 2009-2012 (6 py) from the Academy of Finland.

LightweIght formal Methods for distributed component-based Embedded systems (LIME) 2007-2009 (6 py) from Tekes—the Finnish Funding Agency for Technology and Innovation and companies

LightweIght formal Methods for distributed component-based Embedded systems (LIME2) 2009-2011 (2.5 py) from Tekes and companies

Model-Based Safety Evaluation of Automation Systems (MODSAFE) 2007-2011 (5 py) from the Ministry of Employment and the Economy

Supervised doctoral theses (Helsinki University of Technology/Aalto University):

Roland Kindermann: SMT-based Verification of Timed Systems. 2014

Tero Laitinen: Extending SAT Solver with Parity Reasoning. 2014

Jori Dubrovin: Efficient Symbolic Model Checking of Concurrent Systems. 2011.

Antti Hyvärinen: Grid Based Propositional Satisfiability Solving. 2011.

Tommi Syrjänen: Logic Programs and Cardinality Constraints: Theory and Practice. 2009.

Matti Järvisalo: Structure-Based Satisfiability Checking: Analyzing and Harnessing the Potential. 2008.

Emilia Oikarinen: Modularity in Answer Set Programs. 2008.

Henrik Petander: A Network Mobility Management Architecture for a Heterogeneous Network Environment. 2007 (took over the supervision when Prof. Hannu H. Kari left TKK in 2007).

Heikki Tauriainen: Automata and Linear Temporal Logic: Translations with Transition-Based Acceptance. 2006.

Misa Keinänen: Techniques for Solving Boolean Equation Systems. 2006.

Toni Jussila: On Bounded Model Checking of Asynchronous Systems. 2005.

Tommi Junttila: On the Symmetry Reduction Method for Petri Nets and Similar Formalisms. 2003.

Keijo Heljanko: Combining Symbolic and Partial Order Methods for Model Checking 1-Safe Petri Nets. 2002.

Tuomas Aura: Authorization and Availability - Aspects of Open Network Security. Doctoral Thesis, 2000 (took over the supervision when Prof. Leo Ojala retired in 2000).

Patrik Simons: Extending and Implementing the Stable Model Semantics. 2000.

Janhunen, Tomi: Non-Monotonic Systems: A Framework for Analyzing Semantics and Structural Properties of Non-Monotonic Reasoning. 1998.

Rintanen, Jussi: Lexicographic Ordering as a Basis for Priorities in Default Reasoning. 1997. *(Received the Finnish Science Academy stipendium for a distinguished doctoral thesis 1997).*

Scientific positions of trust:

EurAI (European Association for Artificial Intelligence) Fellow, 2013

Invited Member of the Finnish Academy of Science and Letters, 2013

Invited Member of the Finnish Academy of Technology, 2011

EurAI Fellows Committee, 2015–

Editor-in-Chief of Theory and Practice of Logic Programming, 2010–2014

Editorial board member of the Journal of Artificial Intelligence Research, Mar 2005–Feb 2011

Editorial board member of Theory and Practice of Logic Programming, Apr 2005–Dec 2009, Jan 2015–

Steering Committee Member of the ESF Research Networking Program on Games for Design and Verification (GAMES), 2009–2013

Management Committee Member of the COST Action IC0901: Rich-Model Toolkit - An Infrastructure for Reliable Computer System, 2009–2013

Steering Committee Member of WASP: European Working group on Answer Set Programming (funded by the European commission, FET "Future Emerging Technologies" initiative) and Leader of Work package 3: Language Extensions and Software Engineering for ASP), 2002–2005

Member of the Steering Committee of the International Workshops on Nonmonotonic Reasoning, 2000–2008

Member of the Steering Committee of the International Conferences on Logic Programming and Nonmonotonic Reasoning, 2001–

Member of the Steering Committee of the European Conference on Logics in Artificial Intelligence (JELIA), 2010–

Member of the Executive Committee of the Association for Logic Programming, 2005–2009

Refereeing:	**Journals:**

ACM Transactions on Computational Logic, Annals of Mathematics and Artificial Intelligence, Artificial Intelligence, Communications of the ACM, Fundamenta Informaticae, IEEE Transactions on Knowledge and Data Engineering, Journal of Algorithms in Logic, Informatics and Cognition, Journal of Logic and Computation, Journal of Logic Programming, Theory and Practice of Logic Programming, Zentralblatt für Mathematik

Research proposals:
Austrian Science Fund; Deutsche Forschungsgemeinschaft; European Science Foundation, Standing Committee for Physical & Engineering Sciences; NICTA, Australia; Swedish Research Council for Engineering Sciences

Numerous conferences and workshops

International Program Committees:

Program committee member of more than 60 international conferences and *chair* of 12 international meetings.

Awards: 20 Year Test of Time Paper Award, International Conference on Logic Programming, 2016

Knight, First Class, of the Order of the White Rose of Finland, 2015

The annual dissertation award of the Finnish Society for Computer Science for a distinguished doctoral dissertation in Computer Science in 1993.

Superior of the year at Helsinki University of Technology 2007 (Teknillisen korkeakoulun vuoden esimies 2007).

Other recent major service:

National Defence Course, March 2017

Member of the Council of CSC – It Center for Science, 2017-2018