Licentiate Theses from the Department of Information Technology

The following is an index of the Licentiate Theses series from the Department of Information Technology at Uppsala University. This series has ISSN 1404-5117. The theses can be ordered from the Department of Information Technology, Uppsala University, Box 337, SE-751 05 Uppsala, Sweden. Most of them are also available electronically from `http://www.it.uu.se/research/publications/lic/`.

[2023-003] Anh Tung Nguyen. *Security Allocation in Networked Control Systems*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2023.

[2023-002] Philipp Pilar. *Integrating Prior Knowledge into Machine Learning Models with Applications in Physics*. Licentiate thesis, Department of Information Technology, Uppsala University, September 2023.

[2023-001] Håkan Runvik. *Modeling and Estimation of Impulsive Biomedical Systems*. Licentiate thesis, Department of Information Technology, Uppsala University, June 2023.

[2022-003] Camille Clouard. *Computational Statistical Methods for Genotyping Biallelic DNA Markers from Pooled Experiments*. Licentiate thesis, Department of Information Technology, Uppsala University, November 2022.

[2022-002] Gustaf Borgström. *Making Sampled Simulations Faster by Minimizing Warming Time*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2022.

[2022-001] Sam Hylamia. *Secure In-body Communication and Sensing*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2022.

[2021-002] Karl Bengtsson Bernander. *Improving Training of Deep Learning for Biomedical Image Analysis and Computational Physics*. Licentiate thesis, December 2021.

[2021-001] Niklas Gunnarsson. *On the Registration and Modeling of Sequential Medical Images*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2021.

[2020-006] David Widmann. *Calibration of Probabilistic Predictive Models*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2020.

[2020-005] Anna Wigren. *Exploiting Conjugacy in State-Space Models with Sequential Monte Carlo*. Licentiate thesis, Department of Information Technology, Uppsala University, May 2020.

[2020-004] Muhammad Osama. *Machine Learning for Spatially Varying Data*. Licentiate thesis, Department of Information Technology, Uppsala University, April 2020.

[2020-003] Christos Sakalis. *Securing the Memory Hierarchy from Speculative Side-Channel Attacks*. Licentiate thesis, Department of Information Technology, Uppsala University, March 2020.

[2020-002] Ulrika Sundin. *Global Radial Basis Function Collocation Methods for PDEs*. Licentiate thesis, Department of Information Technology, Uppsala University, March 2020.

[2019-007] Carl Andersson. *Deep Learning Applied to System Identification: A Probabilistic Approach*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2019.

[2019-006] Kristiina Ausmees. *Efficient Computational Methods for Applications in Genomics*. Licentiate thesis, Department of Information Technology, Uppsala University, November 2019.

[2019-005] Carl Jidling. *Tailoring Gaussian Processes for Tomographic Reconstruction*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2019.

[2019-004] Amin Kaveh. *Local Measures for Probabilistic Networks*. Licentiate thesis, Department of Information Technology, Uppsala University, September 2019.

[2019-003] Viktor Bro. *Volterra Modeling of the Human Smooth Pursuit System in Health and Disease*. Licentiate thesis, Department of Information Technology, Uppsala University, May 2019.

[2019-002] Anton G. Artemov. *Inverse Factorization in Electronic Structure Theory: Analysis and Parallelization*. Licentiate thesis, Department of Information Technology, Uppsala University, June 2019.

[2019-001] Diane Golay. *An Invisible Burden: An Experience-Based Approach to Nurses' Daily Work Life with Healthcare Information Technology*. Licentiate thesis, Department of Information Technology, Uppsala University, March 2019.

[2018-004] Charalampos Orfanidis. *Robustness in Low Power Wide Area Networks*. Licentiate thesis, Department of Information Technology, Uppsala University, June 2018.

[2018-003] Fredrik Olsson. *Modeling and Assessment of Human Balance and Movement Disorders Using Inertial Sensors*. Licentiate thesis, Department of Information Technology, Uppsala University, May 2018.

[2018-002] Tatiana Chistiakova. *Ammonium Based Aeration Control in Wastewater Treatment Plants - Modelling and Controller Design*. Licentiate thesis, Department of Information Technology, Uppsala University, April 2018.

[2018-001] Kim-Anh Tran. *Static Instruction Scheduling for High Performance on Energy-Efficient Processors*. Licentiate thesis, Department of Information Technology, Uppsala University, January 2018.

[2017-003] Oscar Samuelsson. *Fault Detection in Water Resource Recovery Facilities*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2017.

[2017-002] Germán Ceballos. *Modeling the Interactions Between Tasks and the Memory System*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2017.

[2017-001] Diana Yamalova. *Hybrid Observers for Systems with Intrinsic Pulse-Modulated Feedback*. Licentiate thesis, Department of Information Technology, Uppsala University, March 2017.

[2016-012] Peter Backeman. *New Techniques for Handling Quantifiers in Boolean and First-Order Logic*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2016.

[2016-011] Andreas Svensson. *Learning Probabilistic Models of Dynamical Phenomena Using Particle Filters*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2016.

[2016-010] Aleksandar Zeljić. *Approximations and Abstractions for Reasoning about Machine Arithmetic*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2016.

[2016-009] Timofey Mukha. *Inflow Generation for Scale-Resolving Simulations of Turbulent Boundary Layers*. Licentiate thesis, Department of Information Technology, Uppsala University, September 2016.

[2016-008] Simon Sticko. *Towards Higher Order Immersed Finite Elements for the Wave Equation*. Licentiate thesis, Department of Information Technology, Uppsala University, September 2016.

[2016-007] Volkan Cambazoglou. *Protocol, Mobility and Adversary Models for the Verification of Security*. Licentiate thesis, Department of Information Technology, Uppsala University, September 2016.

[2016-006] Anton Axelsson. *Context: The Abstract Term for the Concrete*. Licentiate thesis, Department of Information Technology, Uppsala University, May 2016.

[2016-005] Ida Bodin. *Cognitive Work Analysis in Practice: Adaptation to Project Scope and Industrial Context*. Licentiate thesis, Department of Information Technology, Uppsala University, March 2016.

[2016-004] Kasun Hewage. *Towards a Secure Synchronous Communication Architecture for Low-power Wireless Networks*. Licentiate thesis, Department of Information Technology, Uppsala University, February 2016.

[2016-003] Sven-Erik Ekström. *A Vertex-Centered Discontinuous Galerkin Method for Flow Problems*. Licentiate thesis, Department of Information Technology, Uppsala University, February 2016.

[2016-002] Rubén Cubo. *Mathematical Modeling for Optimization of Deep Brain Stimulation*. Licentiate thesis, Department of Information Technology, Uppsala University, January 2016.

[2016-001] Victor Shcherbakov. *Radial Basis Function Methods for Pricing Multi-Asset Options*. Licentiate thesis, Department of Information Technology, Uppsala University, January 2016.

[2015-006] Hanna Holmgren. *Towards Accurate Modeling of Moving Contact Lines*. Licentiate thesis, Department of Information Technology, Uppsala University, November 2015.

[2015-005] Siyang Wang. *Analysis of Boundary and Interface Closures for Finite Difference Methods for the Wave Equation*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2015.

[2015-004] Pavol Bauer. *Parallelism and Efficiency in Discrete-Event Simulation*. Licentiate thesis, Department of Information Technology, Uppsala University, November 2015. PDF updated 2015-10-27 to include the papers.

[2015-003] Fredrik Hellman. *Multiscale and Multilevel Methods for Porous Media Flow Problems*. Licentiate thesis, Department of Information Technology, Uppsala University, September 2015.

[2015-002] Ali Dorostkar. *Developments in preconditioned iterative methods with application to glacial isostatic adjustment models*. Licentiate thesis, Department of Information Technology, Uppsala University, May 2015.

[2015-001] Karl Ljungkvist. *Techniques for Finite Element Methods on Modern Processors*. Licentiate thesis, Department of Information Technology, Uppsala University, January 2015.

[2014-007] Ramūnas Gutkovas. *Advancing Concurrent System Verification: Type based approach and tools*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2014.

[2014-006] Per Mattsson. *Pulse-modulated Feedback in Mathematical Modeling and Estimation of Endocrine Systems*. Licentiate thesis, Department of Information Technology, Uppsala University, September 2014.

[2014-005] Thomas Lind. *Change and Resistance to Change in Health Care: Inertia in Sociotechnical Systems*. Licentiate thesis, Department of Information Technology, Uppsala University, June 2014.

[2014-004] Anne-Kathrin Peters. *The Role of Students' Identity Development in Higher Education in Computing*. Licentiate thesis, Department of Information Technology, Uppsala University, April 2014.

[2014-003] Liang Dai. *On Several Sparsity Related Problems and the Randomized Kaczmarz Algorithm.* Licentiate thesis, Department of Information Technology, Uppsala University, April 2014.

[2014-002] Johannes Nygren. *Output Feedback Control - Some Methods and Applications.* Licentiate thesis, Department of Information Technology, Uppsala University, March 2014.

[2014-001] Daniel Jansson. *Mathematical Modeling of the Human Smooth Pursuit System.* Licentiate thesis, Department of Information Technology, Uppsala University, January 2014.

[2013-007] Hjalmar Wennerström. *Meteorological Impact and Transmission Errors in Outdoor Wireless Sensor Networks.* Licentiate thesis, Department of Information Technology, Uppsala University, December 2013.

[2013-006] Kristoffer Virta. *Difference Methods with Boundary and Interface Treatment for Wave Equations.* Licentiate thesis, Department of Information Technology, Uppsala University, October 2013.

[2013-005] Emil Kieri. *Numerical Quantum Dynamics.* Licentiate thesis, Department of Information Technology, Uppsala University, October 2013. Included papers available at `http://urn.kb.se/resolve?urn=urn:nbn:se:uu:diva-179058`, `http://www.it.uu.se/research/publications/reports/2013-019/`, `http://www.it.uu.se/research/publications/reports/2013-007/`.

[2013-004] Johannes Åman Pohjola. *Bells and Whistles: Advanced Language Features in Psi-Calculi.* Licentiate thesis, Department of Information Technology, Uppsala University, October 2013.

[2013-003] Daniel Elfverson. *On Discontinuous Galerkin Multiscale Methods.* Licentiate thesis, Department of Information Technology, Uppsala University, June 2013.

[2013-002] Marcus Holm. *Scientific Computing on Hybrid Architectures.* Licentiate thesis, Department of Information Technology, Uppsala University, May 2013.

[2013-001] Olov Rosén. *Parallelization of Stochastic Estimation Algorithms on Multicore Computational Platforms.* Licentiate thesis, Department of Information Technology, Uppsala University, April 2013.

[2012-009] Andreas Sembrant. *Efficient Techniques for Detecting and Exploiting Runtime Phases.* Licentiate thesis, Department of Information Technology, Uppsala University, December 2012.

[2012-008] Palle Raabjerg. *Extending Psi-calculi and their Formal Proofs.* Licentiate thesis, Department of Information Technology, Uppsala University, November 2012.

[2012-007] Margarida Martins da Silva. *System Identification and Control for General Anesthesia based on Parsimonious Wiener Models*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2012.

[2012-006] Martin Tillenius. *Leveraging Multicore Processors for Scientific Computing*. Licentiate thesis, Department of Information Technology, Uppsala University, September 2012.

[2012-005] Egi Hidayat. *On Identification of Endocrine Systems*. Licentiate thesis, Department of Information Technology, Uppsala University, June 2012.

[2012-004] Soma Tayamon. *Nonlinear System Identification with Applications to Selective Catalytic Reduction Systems*. Licentiate thesis, Department of Information Technology, Uppsala University, June 2012.

[2012-003] Magnus Gustafsson. *Towards an Adaptive Solver for High-Dimensional PDE Problems on Clusters of Multicore Processors*. Licentiate thesis, Department of Information Technology, Uppsala University, March 2012. Included papers available at `http://dx.doi.org/10.1007/978-3-642-11795-4_44`, `http://dx.doi.org/10.1007/978-3-642-28145-7_36`, `http://www.it.uu.se/research/publications/reports/2011-022` and `http://www.it.uu.se/research/publications/reports/2012-001`.

[2012-002] Fredrik Bjurefors. *Measurements in Opportunistic Networks*. Licentiate thesis, Department of Information Technology, Uppsala University, March 2012.

[2012-001] Gunnika Isaksson-Lutteman. *Future Train Traffic Control – Development and deployment of new principles and systems in train traffic control*. Licentiate thesis, Department of Information Technology, Uppsala University, April 2012.

[2011-006] Anette Löfström. *Intranet Use as a Leadership Strategy*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2011.

[2011-005] Elena Sundkvist. *A High-Order Accurate, Collocated Boundary Element Method for Wave Propagation in Layered Media*. Licentiate thesis, Department of Information Technology, Uppsala University, September 2011.

[2011-004] Niclas Finne. *Towards Adaptive Sensor Networks*. Licentiate thesis, Department of Information Technology, Uppsala University, May 2011.

[2011-003] Rebecka Janols. *Tailor the System or Tailor the User? How to Make Better Use of Electronic Patient Record Systems*. Licentiate thesis, Department of Information Technology, Uppsala University, May 2011.

[2011-002] Xin He. *Robust Preconditioning Methods for Algebraic Problems, Arising in Multi-Phase Flow Models.* Licentiate thesis, Department of Information Technology, Uppsala University, April 2011.

[2011-001] David Eklöv. *Efficient Methods for Application Performance Analysis.* Licentiate thesis, Department of Information Technology, Uppsala University, February 2011.

[2010-005] Mikael Laaksoharju. *Let Us Be Philosophers! Computerized Support for Ethical Decision Making.* Licentiate thesis, Department of Information Technology, Uppsala University, September 2010.

[2010-004] Kenneth Duru. *Perfectly Matched Layers for Second Order Wave Equations.* Licentiate thesis, Department of Information Technology, Uppsala University, May 2010.

[2010-003] Salman Zubair Toor. *Managing Applications and Data in Distributed Computing Infrastructures.* Licentiate thesis, Department of Information Technology, Uppsala University, March 2010.

[2010-002] Carl Nettelblad. *Using Markov Models and a Stochastic Lipschitz Condition for Genetic Analyses.* Licentiate thesis, Department of Information Technology, Uppsala University, March 2010.

[2010-001] Anna Nissen. *Absorbing Boundary Techniques for the Time-dependent Schrödinger Equation.* Licentiate thesis, Department of Information Technology, Uppsala University, February 2010.

[2009-005] Martin Kronbichler. *Numerical Methods for the Navier-Stokes Equations Applied to Turbulent Flow and to Multi-Phase Flow.* Licentiate thesis, Department of Information Technology, Uppsala University, December 2009.

[2009-004] Katharina Kormann. *Numerical Methods for Quantum Molecular Dynamics.* Licentiate thesis, Department of Information Technology, Uppsala University, October 2009.

[2009-003] Marta Lárusdóttir. *Listen to Your Users - The Effect of Usability Evaluation on Software Development Practice.* Licentiate thesis, Department of Information Technology, Uppsala University, October 2009.

[2009-002] Elina Eriksson. *Making Sense of Usability - Organizational Change and Sensemaking when Introducing User-Centred Systems Design in Public Authorities.* Licentiate thesis, Department of Information Technology, Uppsala University, October 2009.

[2009-001] Joakim Eriksson. *Detailed Simulation of Heterogeneous Wireless Sensor Networks.* Licentiate thesis, Department of Information Technology, Uppsala University, May 2009.

[2008-003] Andreas Hellander. *Numerical Simulation of Well Stirred Biochemical Reaction Networks Governed by the Master Equation.* Licentiate thesis, Department of Information Technology, Uppsala

University, October 2008. Included papers available at http://dx.doi.org/10.1016/j.jcp.2007.07.020, http://dx.doi.org/10.1007/s10543-008-0174-z, and http://dx.doi.org/10.1063/1.2897976.

[2008-002] Ioana Rodhe. *Query Authentication and Data Confidentiality in Wireless Sensor Networks*. Licentiate thesis, Department of Information Technology, Uppsala University, June 2008.

[2008-001] Mattias Wiggberg. *Unwinding Processes in Computer Science Student Projects*. Licentiate thesis, Department of Information Technology, Uppsala University, March 2008.

[2007-006] Björn Halvarsson. *Interaction Analysis and Control of Bioreactors for Nitrogen Removal*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2007.

[2007-005] Mahen Jayawardena. *Parallel Algorithms and Implementations for Genetic Analysis of Quantitative Traits*. Licentiate thesis, Department of Information Technology, Uppsala University, September 2007. Typo corrected Sep 10 2007. Included papers available at http://www.it.uu.se/research/publications/lic/2007-005/paperA.pdf, http://www.it.uu.se/research/publications/lic/2007-005/paperB.pdf, http://www.it.uu.se/research/publications/lic/2007-005/paperC.pdf, and http://www.it.uu.se/research/publications/lic/2007-005/paperD.pdf.

[2007-004] Olof Rensfelt. *Tools and Methods for Evaluation of Overlay Networks*. Licentiate thesis, Department of Information Technology, Uppsala University, September 2007.

[2007-003] Thabotharan Kathiravelu. *Towards Content Distribution in Opportunistic Networks*. Licentiate thesis, Department of Information Technology, Uppsala University, June 2007. Typo corrected 2007-06-01.

[2007-002] Jonas Boustedt. *Students Working with a Large Software System: Experiences and Understandings*. Licentiate thesis, Department of Information Technology, Uppsala University, May 2007.

[2007-001] Manivasakan Sabesan. *Querying Mediated Web Services*. Licentiate thesis, Department of Information Technology, Uppsala University, February 2007.

[2006-012] Stefan Blomkvist. *User-Centred Design and Agile Development of IT Systems*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2006.

[2006-011] Åsa Cajander. *Values and Perspectives Affecting IT Systems Development and Usability Work*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2006.

[2006-010] Henrik Johansson. *Performance Characterization and Evaluation of Parallel PDE Solvers*. Licentiate thesis, Department of Information Technology, Uppsala University, November 2006. Included papers available at `http://www.it.uu.se/research/publications/lic/2006-010/paperA.pdf`, `http://www.it.uu.se/research/publications/lic/2006-010/paperB.pdf`, and `http://www.it.uu.se/research/publications/lic/2006-010/paperC.pdf`.

[2006-009] Eddie Wadbro. *Topology Optimization for Acoustic Wave Propagation Problems*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2006.

[2006-008] Agnes Rensfelt. *Nonparametric Identification of Viscoelastic Materials*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2006.

[2006-007] Stefan Engblom. *Numerical Methods for the Chemical Master Equation*. Licentiate thesis, Department of Information Technology, Uppsala University, September 2006. Included papers available at `http://www.it.uu.se/research/publications/lic/2006-007/paperA.pdf`, `http://www.it.uu.se/research/publications/lic/2006-007/paperB.pdf`, and `http://www.it.uu.se/research/publications/lic/2006-007/paperC.pdf`.

[2006-006] Anna Eckerdal. *Novice Students' Learning of Object-Oriented Programming*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2006.

[2006-005] Arvid Kauppi. *A Human-Computer Interaction Approach to Train Traffic Control*. Licentiate thesis, Department of Information Technology, Uppsala University, May 2006.

[2006-004] Mikael Erlandsson. *Usability in Transportation – Improving the Analysis of Cognitive Work Tasks*. Licentiate thesis, Department of Information Technology, Uppsala University, June 2006. ISSN of originally printed version should be 1404-5117.

[2006-003] Therese Berg. *Regular Inference for Reactive Systems*. Licentiate thesis, Department of Information Technology, Uppsala University, April 2006.

[2006-002] Anders Hessel. *Model-Based Test Case Selection and Generation for Real-Time Systems*. Licentiate thesis, Department of Information Technology, Uppsala University, March 2006.

[2006-001] Linda Brus. *Recursive Black-box Identification of Nonlinear State-space ODE Models*. Licentiate thesis, Department of Information Technology, Uppsala University, January 2006.

[2005-011] Björn Holmberg. *Towards Markerless Analysis of Human Motion*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2005.

[2005-010] Paul Sjöberg. *Numerical Solution of the Fokker-Planck Approximation of the Chemical Master Equation*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2005.

[2005-009] Magnus Evestedt. *Parameter and State Estimation using Audio and Video Signals*. Licentiate thesis, Department of Information Technology, Uppsala University, November 2005.

[2005-008] Niklas Johansson. *Usable IT Systems for Mobile Work*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2005.

[2005-007] Mei Hong. *On Two Methods for Identifying Dynamic Errors-in-Variables Systems*. Licentiate thesis, Department of Information Technology, Uppsala University, November 2005.

[2005-006] Erik Bängtsson. *Robust Preconditioned Iterative Solution Methods for Large-Scale Nonsymmetric Problems*. Licentiate thesis, Department of Information Technology, Uppsala University, November 2005. Typos corrected 2005-11-21.

[2005-005] Peter Nauclér. *Modeling and Control of Vibration in Mechanical Structures*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2005.

[2005-004] Oskar Wibling. *Ad Hoc Routing Protocol Validation*. Licentiate thesis, Department of Information Technology, Uppsala University, September 2005.

[2005-003] Magnus Ågren. *High-Level Modelling and Local Search*. Licentiate thesis, Department of Information Technology, Uppsala University, September 2005.

[2005-002] Håkan Zeffer. *Hardware-Software Tradeoffs in Shared-Memory Implementations*. Licentiate thesis, Department of Information Technology, Uppsala University, May 2005.

[2005-001] Jesper Wilhelmsson. *Efficient Memory Management for Message-Passing Concurrency — part I: Single-threaded execution*. Licentiate thesis, Department of Information Technology, Uppsala University, May 2005.

[2004-006] Stefan Johansson. *High Order Difference Approximations for the Linearized Euler Equations*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2004.

[2004-005] Henrik Löf. *Parallelizing the Method of Conjugate Gradients for Shared Memory Architectures*. Licentiate thesis, Department of Information Technology, Uppsala University, November 2004.

[2004-004] Mohammed El Shobaki. *On-Chip Monitoring for Non-Intrusive Hardware/Software Observability*. Licentiate thesis, Department of Information Technology, Uppsala University, September 2004.

[2004-003] Yngve Selén. *Model Selection.* Licentiate thesis, Department of Information Technology, Uppsala University, October 2004.

[2004-002] Markus Nordén. *Parallel PDE Solvers on cc-NUMA Systems.* Licentiate thesis, Department of Information Technology, Uppsala University, March 2004. Included papers are available at: Paper A: `http://www.sciencedirect.com/science/article/B6V06-49W6S4M-1/2/23cb25585b2742595f319f4cedd0b65f`, Paper C: `http://www.it.uu.se/research/publications/lic/2004-002/2004-002-C.pdf`, Paper D: `http://www.it.uu.se/research/publications/reports/2004-006`.

[2004-001] Niclas Sandgren. *Parametric Methods for Frequency-Selective MR Spectroscopy.* Licentiate thesis, Department of Information Technology, Uppsala University, March 2004.

[2003-015] Erik Berg. *Methods for Run Time Analysis of Data Locality.* Licentiate thesis, Department of Information Technology, Uppsala University, December 2003.

[2003-014] Kajsa Ljungberg. *Numerical Methods for Mapping of Multiple QTL.* Licentiate thesis, Department of Information Technology, Uppsala University, November 2003.

[2003-013] Stina Nylander. *The Ubiquitous Interactor - Mobile Services with Multiple User Interfaces.* Licentiate thesis, Department of Information Technology, Uppsala University, 2003.

[2003-012] Olivier Amoignon. *Adjoint-Based Aerodynamic Shape Optimization.* Licentiate thesis, Department of Information Technology, Uppsala University, October 2003. In the first printed version, many references to the bibliography are off by one. The online version does not have this error.

[2003-011] Tobias Amnell. *Code Synthesis for Timed Automata.* Licentiate thesis, Department of Information Technology, Uppsala University, October 2003.

[2003-010] Dan Wallin. *Exploiting Data Locality in Adaptive Architectures.* Licentiate thesis, Department of Information Technology, Uppsala University, September 2003.

[2003-009] Martin Karlsson. *Cache Memory Design Trade-offs for Current and Emerging Workloads.* Licentiate thesis, Department of Information Technology, Uppsala University, September 2003.

[2003-008] Zoran Radovic. *Efficient Synchronization and Coherence for Nonuniform Communication Architectures.* Licentiate thesis, Department of Information Technology, Uppsala University, September 2003.

[2003-007] Maria Karlsson. *Market Based Programming and Resource Allocation.* Licentiate thesis, Department of Information Technology, Uppsala University, June 2003.

[2003-006] Tomas Olsson. *Bootstrapping and Decentralizing Recommender Systems*. Licentiate thesis, Department of Information Technology, Uppsala University, June 2003.

[2003-005] Mats Ekman. *Urban Water Management - Modelling, Simulation and Control of the Activated Sludge Process*. Licentiate thesis, Department of Information Technology, Uppsala University, May 2003. Errata (updated Jan 2004) available at `http://www.it.uu.se/research/publications/lic/2003-005/Errata.pdf` and `http://www.it.uu.se/research/publications/lic/2003-005/Errata.ps.gz`.

[2003-004] Malin Ljungberg. *Handling of Curvilinear Coordinates in a PDE Solver Framework*. Licentiate thesis, Department of Information Technology, Uppsala University, May 2003.

[2003-003] Inger Boivie. *Usability and Users' Health Issues in Systems Development*. Licentiate thesis, Department of Information Technology, Uppsala University, March 2003.

[2003-002] Jenny Persson. *Basic Values in Software Development and Organizational Change*. Licentiate thesis, Department of Information Technology, Uppsala University, March 2003.

[2003-001] Per Sundqvist. *Preconditioners and Fundamental Solutions*. Licentiate thesis, Department of Information Technology, Uppsala University, March 2003.

[2002-008] Henrik Lundgren. *Implementation and Real-world Evaluation of Routing Protocols for Wireless Ad hoc Networks*. Licentiate thesis, Department of Information Technology, Uppsala University, November 2002.

[2002-007] Samuel Sundberg. *Semi-Toeplitz Preconditioning for Linearized Boundary Layer Problems*. Licentiate thesis, Department of Information Technology, Uppsala University, November 2002. Included papers available at `http://www.it.uu.se/research/publications/lic/2002-007/2002-007-paperA.pdf`, `http://www.it.uu.se/research/publications/lic/2002-007/2002-007-paperA.ps.gz`, `http://www.it.uu.se/research/publications/lic/2002-007/2002-007-paperB.ps.gz`, and `http://www.it.uu.se/research/publications/lic/2002-007/2002-007-paperB.pdf`.

[2002-006] Kalyani Munasinghe. *On Using Mobile Agents for Load Balancing in High Performance Computing*. Licentiate thesis, Department of Information Technology, Uppsala University, June 2002.

[2002-005] Kaushik Mahata. *Identification of Dynamic Errors-in-Variables Models*. Licentiate thesis, Department of Information Technology, Uppsala University, May 2002.

[2002-004] Martin Nilsson. *Iterative Solution of Maxwell's Equations in Frequency Domain*. Licentiate thesis, Department of Information Technology, Uppsala University, June 2002.

[2002-003] Emad Abd-Elrady. *Harmonic Signal Modeling Based on the Wiener Model Structure*. Licentiate thesis, Department of Information Technology, Uppsala University, May 2002.

[2002-002] Anders Berglund. *On the Understanding of Computer Network Protocols*. Licentiate thesis, Department of Information Technology, Uppsala University, March 2002.

[2002-001] Eva Mossberg. *Higher Order Finite Difference Methods for Wave Propagation Problems*. Licentiate thesis, Department of Information Technology, Uppsala University, February 2002.

[2001-016] Johan Furunäs Åkesson. *Interprocess Communication Utilising Special Purpose Hardware*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2001.

[2001-015] Stefan Söderberg. *A Parallel Block-Based PDE Solver with Space-Time Adaptivity*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2001.

[2001-014] Abraham Zemui. *Fourth Order Symmetric Finite Difference Schemes for the Wave Equation*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2001.

[2001-013] Alexandre David. *Practical Verification of Real-time Systems*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2001.

[2001-012] Per Åhgren. *Teleconferencing, System Identification and Array Processing*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2001.

[2001-011] Pär Samuelsson. *Modelling and control of activated sludge processes with nitrogen removal*. Licentiate thesis, Department of Information Technology, Uppsala University, August 2001.

[2001-010] Johan Edlund. *A Parallel, Iterative Method of Moments and Physical Optics Hybrid Solver for Arbitrary Surfaces*. Licentiate thesis, Department of Information Technology, Uppsala University, August 2001.

[2001-009] Johan Bengtsson. *Efficient Symbolic State Exploration of Timed Systems: Theory and Implementation*. Licentiate thesis, Department of Information Technology, Uppsala University, May 2001.

[2001-008] Markus Bylund. *Personal Service Environments — Openness and User Control in User-Service Interaction*. Licentiate thesis, Department of Information Technology, Uppsala University, June 2001.

[2001-007] Hans Norlander. *Parameterization of State Feedback Gains for Pole Assignment*. Licentiate thesis, Department of Information Technology, Uppsala University, May 2001.

[2001-006] Bengt Göransson. *Usability Design: A Framework for Designing Usable Interactive Systems in Practice*. Licentiate thesis, Department of Information Technology, Uppsala University, April 2001.

[2001-005] Per Carlsson. *Market and Resource Allocation Algorithms with Application to Energy Control*. Licentiate thesis, Department of Information Technology, Uppsala University, April 2001.

[2001-004] Bengt Eliasson. *Numerical Simulation of Kinetic Effects in Ionospheric Plasma*. Licentiate thesis, Department of Information Technology, Uppsala University, April 2001.

[2001-003] Erik K. Larsson. *On Identification of Continuous-Time Systems and Irregular Sampling*. Licentiate thesis, Department of Information Technology, Uppsala University, March 2001.

[2001-002] Johan Steensland. *Domain-based partitioning for parallel SAMR applications*. Licentiate thesis, Department of Information Technology, Uppsala University, March 2001.

[2001-001] Erik Borälv. *Design and Usability in Telemedicine*. Licentiate thesis, Department of Information Technology, Uppsala University, February 2001.

[2000-011] Bharath Bhikkaji. *Model Reduction for Diffusion Systems*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2000.

[2000-010] Markus Lindgren. *Measurement and Simulation Based Techniques for Real-Time Analysis*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2000. Also published as report MRTC 00/25 at Mälardalens högskola.

[2000-009] Jan Nyström. *A formalisation of the ITU-T Intelligent Network standard*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2000.

[2000-008] Marcus Nilsson. *Regular Model Checking*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2000.

[2000-007] Magnus Larsson. *Applying Configuration Management Techniques to Component-Based Systems*. Licentiate thesis, Department of Information Technology, Uppsala University, December 2000. Also published as report MRTC 00/24 at Mälardalens högskola.

[2000-006] Gustaf Naeser. *A Flexible Framework for Detection of Feature Interactions in Telecommunication Systems*. Licentiate thesis, Department of Information Technology, Uppsala University, October 2000.

[2000-005] Fredrik Edelvik. *Finite Volume Solvers for the Maxwell Equations in Time Domain.* Licentiate thesis, Department of Information Technology, Uppsala University, October 2000.

[2000-004] Anders Wall. *A Formal Approach to Analysis of Software Architectures for Real-Time Systems.* Licentiate thesis, Department of Information Technology, Uppsala University, September 2000. Also published as report MRTC 00/21 at Mälardalens högskola.

[2000-003] Fredrik Larsson. *Efficient Implementation of Model-Checkers for Networks of Timed Automata.* Licentiate thesis, Department of Information Technology, Uppsala University, May 2000.

[2000-002] Susanne Remle. *Modeling and Parameter Estimation of the Diffusion Equation.* Licentiate thesis, Department of Information Technology, Uppsala University, May 2000.

[2000-001] Katarina Boman. *Low-Angle Estimation: Models, Methods and Bounds.* Licentiate thesis, Department of Information Technology, Uppsala University, February 2000.