Curriculum Vitae, Prof. Paul Pettersson (2013-03-23)

Paul Emanuel Petersson Fersman (May 19, 1967)
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Professional Preparation:
- Docent in Computer Science, Uppsala University, 2006.
- Doctor of Philosophy in Computer Systems, Uppsala University, 1999.
- Master of Science in Computer Science, Uppsala University, Sweden, 1993.

Positions:
- Professor of Real-Time Systems, at Mälardalen University, Sweden (since 2006; on 50% parental leave January 2008 to September 2009).
- Senior Lecturer (Universitetslektor) at Uppsala University, Sweden (2000-2006).
- Post. Doc. (Forskningsadjunkt), Aalborg University, Denmark (1999-2000).

Appointments:
- Deputy Vice-Chancellor of Mälardalen University (since Sep 2012).
- Director of research of Embedded Systems at the School of Innovation, Design and Engineering at Mälardalen University (Jan to Aug 2012).
- Steering board member of ARTEMIS-IA (2010 to 2013).
- Subject responsible Professor (Ämnesföreträdare) of Computer Science at Mälardalen University (2009 to 2012).
- Head of Formal Modelling and Analysis of Embedded Systems group at Mälardalen University (since 2006).
- Head of Embedded Systems division at the School of Innovation, Design and Engineering at Mälardalen University (2007-2011).
- Programme Director of SSF funded Swedish national graduate school in real-time and embedded systems ARTES (2004-2007).
- Director of Studies of KKS founded Swedish industrial graduate school SAVE-IT (2004-2008).

Thesis supervision:
- Main advisor: Stefan Björnander (Lic. Thesis in 2012 2010), Aida Delic (Lic. Thesis in 2011), Kivanc Doganay (since 2011), Eduard Paul Enoiu (since 2011), Leo Hatvani (since 2009), Anders Hessel (Ph.D. Thesis in 2007), John Håkansson (Ph.D. Thesis in 2009), Raluca Marinescu (since 2011), and Jagadish Suryadevara (Lic. Thesis in 2011).
- Co-advisor: Tobias Amnell (Lic. Thesis in 2003), AnnMarie Ericsson (Ph.D. Thesis in2009), Andreas Johnsen (since 2010), Birgitta Lindström (Ph.D. Thesis in 2009), Aneta Vulgarakis (Ph.D. Thesis in 2012), and Hang Yin (Lic. Thesis in 2012).

Other merits of relevance:
- **Community services:**
  - Invited speaker/panelist: COMPSAC 2011 (panelist), Foundations and Applications of Component-based Design 2010 (speaker), International Workshop on Quality of Service-Oriented Software Systems 2010 (panelist), International Symposium on Software Reliability Engineering 2007 (panelist), Real-time system symposium 2006 (tutorial), Workshop on Critical Systems 2005 (speaker), Workshop on Formal Modelling and Analysis of Timed Systems 2003 (speaker).
  - Organization of international conferences and workshops (co-chair): NWPT 2011 and 2004, QUASSOS 2009-2010, EUC 2009-2010 (track chair), CORCS 2012, 2011, 2009, and 2008, FORMATS 2005, and RT-Tools 2002 and 2001.
  - PC member of TACAS 2014 and 2008, FTSCS 2013, ICTSS 2012, A-MOST 2012, Embedded World 2012, A-MOST 2012, VVPS 2011, COMPSAC 2011-2012, and 2009-2008, ETFA 2008-2012, HCSS 2010, NWPT 2010-2013, SPIN 2007-2008, and 2010, MCC 2009, VVPS 2009, FORMATS 2005-

2009, TiSto 2009, IEP 2009, SEFM 2007-2008, RTiS 2003, TPTS 2002, MTCS 2002, SIVOOES 2001, and MVI 2001.
  - Reviewer for Vienna Science and Technology Fund 2012, Austrian Science Fund 2010, and Netherlands Organization for Scientific Research 2008 and 2009.
  - Opponent at public defences: Ph.D. Viet Yen Nguyen (RWTH Aachen, 2012), Ph.D. Guillermo Rodriguez-Navas (Universitat de les Illes Balears, 2010), Ph.D. Yahor Bondarau (Technical University Eindhoven, 2009), and Fil.lic. Anders Pettersson (Mälardalen university, 2003).
  - Member of Ph.D. examination committees: Johan Fredriksson (Mälardalens university, 2008), Robert Nilsson (Skövde university, 2006), Dan Wallin (Uppsala university, 2006), and Gustaf Naeser (Mälardalen university, 2005).
  - Reviewer of major international journals.
- **Entrepreneurial achievements:**
  - Co-founder of the tools UPPAAL (model checker for timed systems, http://www.uppaal.org/), Times (tool box for schedulability analysis, and code synthesis of embedded systems, http://www.times-tool.com/), Cover (model-based testing, http://www.uppaal.org/cover/), and UPPAAL Port (component-based modeling and analysis of embedded systems, http://www.uppaal.org/port/).
  - Co-founder and chairman of board of spin-off company Up4all International AB, http://www.-uppaal.com/.
- **Awards:** Best presentation award at SAFECOMP 2011, and Best tool demo award at ETAPS 2002.
- **Projects funded by the Swedish Research Council (VR):** Contract-Based Components for Embedded Software (frame project, co-applicant, 2011-2014), Design Techniques for Adaptive Embedded Systems (frame project, co-applicant, 2010-2013), Embedded Systems Verification using Timed Automata Technology (2009-2011), and Testing of Real-Time Systems: Theory and Tools (2005-2007).
- **Impact of research:** My h-index is 36 and 16 of my papers have been cited over 100 times, based on citation data from Google Scholar. UPPAAL is a widely disseminated tool that has been downloaded over 75 000 times (currently approx. 30 times per day) and has been used in numerous courses and industrial case studies.

Five Most Cited Publications

- Kim G. Larsen, Paul Pettersson and Wang Yi. UPPAAL in a Nutshell. In Springer International Journal of Software Tools for Technology Transfer, 1(1–2):134–152. Springer–Verlag 1997. Number of citations: **1571**.
- Johan Bengtsson, Kim G. Larsen, Fredrik Larsson, Paul Pettersson and Wang Yi. UPPAAL — a Tool Suite for Automatic Verification of Real-Time Systems. In Proceedings of the 4th DIMACS Workshop on Verification and Control of Hybrid Systems, Lecture Notes in Computer Science 1066, pages 232–243, Rajeev Alur, Thomas A. Henzinger and Eduardo D. Sontag (Eds.). Springer–Verlag 1995. Number of citations: **490**.
- Gerd Behrmann, Ansgar Fehnker, Thomas Hune, Kim G. Larsen, Paul Pettersson, Judi Romijn, and Frits Vaandrager. Minimum-Cost Reachability for Priced Timed Automata. In Proceedings of 4th Intentional Workshop on Hybrid Systems: Computation and Control (HSCC'01), pages 147–161. Lecture Notes in Computer Science 2034, Springer–Verlag 2001. Number of citations: **223**.
- Kim G. Larsen, Paul Pettersson and Wang Yi. Model-Checking for Real-Time Systems. In Proceedings of the 10th International Conference on Fundamentals of Computation Theory. Lecture Notes in Computer Science 965, pages 62–88, Horst Reichel (Ed.). Springer–Verlag 1995. Number of citations: **168**.
- Wang Yi, Paul Pettersson and Mats Daniels. Automatic Verification of Real-Time Communicating Systems by Constraint Solving. In Proceedings of the 7th International Conference on Formal Description Techniques, pages 223–238, Dieter Hogrefe and Stefan Leue (Eds.). North-Holland 1994. Number of citations: **162**.