## Curriculum Vitae: Dietmar Pfahl

Affiliation: Lund University, Department of Computer Science, Ole Römers väg 3, SE-223 63

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Date of birth: 9 January 1963
Place of birth: Munich (Germany)

Gender: male Family status: married

Citizenship: German; Canadian Permanent Resident

#### **Academic Education**

- PhD in Computer Science (Dr. rer. nat.) from University of Kaiserslautern, Germany, 2001.
- Postgraduate studies in logic, cognitive psychology and language processing, University of the Basque Country in San Sebastian, Spain, supported by a grant of the Spanish Ministry of Foreign Affairs, December 1990 to September 1991.
- Diploma (comparable to MSc.) in Applied Mathematics and Economics (Diplom-Wirtschaftsmathematik) from University of Ulm, Germany, 1987.

### **Professional Experience**

- Associate Professor (with tenure): Lund University, Sweden, Department of Computer Science, since 08/2010.
- Owner and Director: Pika Research Inc., Claresholm, Canada, since 08/2009.
- **Adjunct Professor:** University of Calgary, Canada, Schulich School of Engineering, Dept. Electrical & Computer Engineering, since 01/2008.
- Adjunct Professor (Professor II): University of Oslo, Norway, Department of Informatics, 05/2011 to 12/2011 (20%).
- Adjunct Associate Professor: University of Oslo, Norway, Department of Informatics, 01/2008 to 12/2010 (20%).
- Research Scientist: Simula Research Laboratory, 01/2008 to 12/2009 (20% since 7/2009).
- Associate Professor (tenure-track): University of Calgary, Canada, Schulich School of Engineering, Dept. Electrical & Computer Engineering, 07/2007 to 12/2007.
- Assistant Professor (tenure-track): University of Calgary, Canada, Schulich School of Engineering, Dept. Electrical & Computer Engineering, 07/2005 to 06/2007.
- **Department Head:** Fraunhofer Institute for Experimental Software Engineering, Kaiserslautern, Germany, Document Engineering, 07/2001 to 06/2005. Supervisor for up to 15 employees (12 of which scientific staff); Budget responsibility for € 1.500.000,-.
- **Project Manager:** Fraunhofer Institute for Experimental Software Engineering, Kaiserlautern, Germany, Quality and Process Engineering, International Projects, Certifiable Education and Training in Software Engineering, 02/1996 to 06/2001.
- **Software Quality Consultant and Project Manager:** Siemens AG, München, Germany, Corporate Research and Development, Software Quality and Process Engineering, 01/1993 to 02/1996.
- **Junior Scientist:** German Remote Sensing Data Center (DFD) of the German Aerospace Research Establishment (DLR), Oberpfaffenhofen, Germany, Processor Systems Section, 03/1992 to 12/1992.
- **Freelancer:** Analyses of software quality data for Siemens ALBIS, Zürich, Switzerland; Translation of book "Software Metrics" by Karl-Heinrich Möller and Daniel Paulish (both with Siemens AG), 12/1990 to 02/1992
- **Software Quality Consultant:** Siemens AG, München, Germany, Corporate Production and Logistics, Software Quality, 02/1987 to 11/1990.

## Projects (since 1996 / selection)

- **2010-2012:** Consulting project with City of Calgary and University of Calgary focusing on the analysis and improvement of residential waste collection processes; Role: Co-Investigator.
- 2010-2011: Member of ELLIIT (Excellence Center at Linköping-Lund in Information Technology), funded by the Department of Education's increased support for Strategic Research Areas (2010-2014) together with several other researchers at Lund University (45%), Linköping University (45%), Blekinge Institute of Technology (5%), and Halmstad University (5%)
- **2009-2010:** Industry collaboration with Telenor, Oslo; Role: Co-investigator (Principal Investigator: Dag Sjoberg, University of Oslo)
- 2006-2008: NSERC-funded research project VSPL (The Virtual Software Production Laboratory): An Innovative Approach to Accelerate Theory Building in Software Engineering, NSERC Grant Application no.: 327885-06 (2006-2010) 105,000 Can\$; Role: Principal Investigator.
- **2005-2007:** Research project "Virtual Software Engineering Laboratory of the Future", University of Calgary Start-up Grant 25,000 Can\$; Role: Principal Investigator.
- 2005: Consulting project with Robert Bosch Corporate Research on various topics related to software process simulation;.
- **2004-2005:** Research project with Siemens Corporate Research on the topic "Software Productivity: Impact of S/W Work-split in Multi-Site Development"; as part of this project a simulation model was developed; Role: Principal Investigator.
- **2003-2004:** EU-funded network of excellence in professional learning (ProLearn), European Union 6th Framework Programme (FP), Proposal/Contract no.: 507310; Role: Partner manager.
- **2003:** Cooperation project with University of Calgary, Canada, on the development of a simulation environment for the evaluation of software technologies; Role: Principal Investigator.
- **2002-2003:** Consulting project with DaimlerChrysler AG in the context of a study on the future of (embedded) software development in the Commercial Vehicle Division; Role: Principal Investigator.
- **2001-2003:** EU-funded thematic network for technology-enhanced learning (Time2Learn), European Union 5th FP, IST-2001-38263; Role: Partner manager.
- **2000-2002:** EU-funded research project CORONET (Corporate Software Engineering Knowledge Networks for Improved Training of the Work Force). Partners from industry: DaimlerChrysler, Highware, INDRA; Role: Project coordinator (since 2001).
- **1999-2001:** Research and consulting project with Siemens Health Services on the development and introduction of a COTS acquisition process; Role: Principal Investigator.
- **1997-1999:** EU-funded research project PROFES (Product Focused Improvement of Embedded Software Processes). Partners from industry: Dräger, Ericsson, Schlumberger; Role: Partner project manager of Fraunhofer IESE.
- 1997-1998: Research and consulting project with Siemens AG on the modelling and simulation of software development processes using the System Dynamics method; Role: Principal Investigator.
- 1996-1997: Research and consulting project with Bosch-Telecom GmbH; Definition and introduction of a measurement programme in a development organisation as preparatory step for a comprehensive process improvement initiative; Role: Principal Investigator.

# Principal and Co-Investigator in Research and Transfer Collaborations with Industry

- City of Calgary, Canada (2010-2012)
- Chartwell Technology Inc., Calgary, Canada (2007-2010)
- Telenor, Oslo, Norway (2008-2009)
- Robert Bosch GmbH, Stuttgart, Germany (2004-2006)
- Siemens AG, München, Germany (1996-2005)
- DaimlerChrysler AG, Ulm, Germany (2003-2004)
- MAN Roland, Offenbach, Germany (2002)
- Siemens Health Services GmbH, Erlangen, Germany (1998-2000)
- Tenovis (Bosch Telecom), Frankfurt, Germany (1996)

# Service and Teaching in Academia

General Chair: International Conference on Software Process (ICSP, 2009)

- Program (co-)chair: International Conference on Software Process (ICSSP, 2011), International
  Advanced School of Empirical Software Engineering (IASESE 2011), International Conference on
  Software Process (ICSP, 2007-2008), International workshop "Software Process Simulation & Modeling"
  (ProSim 2003-2006)
- Program committee member: Internat'I conference "Product Focused Software Proces Improvement" (PROFES 2005-2012), Internat'l Symposium on Empirical Software Engineering and Measurement (ESEM 2008-2012, Posters: 2007), Internat'l conference "Evaluation & Assessment in Software Engineering" (EASE 2012). Scientific track of the "Software Quality Days". Vienna, Austria (SQD 2012). International Conference on Software Process (ICSSP, 2011), Internat'l Conference on Software Process (ICSP 2007-2010), Internat'l conference "Engineering of Computer-Based Systems" (ECBS 2002-2009). Internat'l workshop "Software-Qualitätsmodellierung und -bewertung" (SQMB 2008-2009). Internat'l workshop "Learning Software Organisations" (LSO 2001, 2005-2006, 2008-2009), Internat'l conference on computer science and software engineering (CASCON 2008), Internat'l conference on Software Technologies and Processes (STeP 2008), Internat'l workshop "Software Engineering for Large Scale Computing" (SELSC 2008), Internat'l workshop "Computational Science in Software Engineering" (CSSE 2006-2007), IASTED internat'I conference "Software Engineering" (IASTED-SE 2005-2008), Internat'l workshop "Realising Evidence-Based Software Engineering" (REBSE 2007), Internat'l workshop "Event-Based IT Systems" (EBITS 2007), Internat'l "Workshop Series on Empirical Software Engineering" (WSESE 2005-2007), Internat'l workshop "Software Engineering Decision Support" (SEDECS 2003-2006), IASTED internat'l conference "Software Engineering Applications" (IASTED-SEA 2005-2006), Internat'l joint workshop on "Software Process / Software Process Simulation Modeling" (SPW/ProSim 2006), Internat'l conference "Computing and Informatics" (ICOCI 2006), Special session "Value-based Software Engineering" ( 32st EUROMICRO Conference on Software Engineering and Advanced Applications - SEAA 2006), Internat'l workshop "Value-based Software Engineering" (VBSE-DSS 2006), Internat'l workshop "Software Process Simulation Modeling" (ProSim 1999, 2003-2005), Internat'l conference on the "Quality of Software Architectures" (QoSA 2005), Internat'l conference on "Knowledge-Based Intelligent Information & Engineering Systems" - Invited session on "Knowledge-Based Technology in Web-Based Education" (KES 2005), Internat'l workshop "(Virtual) Communities of Practice within Modern Organizations" (CoP 2003), ACIS Internat'l conference "Computer and Information Science" (ICIS 2002), Internat'l conference "Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing" (SDNP 2002), Internat'l workshop "Individual and Organizational Learning for Software Improvement" (INOR 2001))
- **Member of editorial boards:** Journal of Software: Evolution and Process, John Wiley & Sons (since 01/2010), Software Process: Improvement and Practice, John Wiley & Sons (from 02/2007 to 12/2009), International Journal of Patterns, http://www.ijop.org/en/home.html (since 06/2007), Journal of Computer Science, Science Publications (Regional Editor, from 01/2004 to 12/2009)
- Reviewer for scientific journals: Annals of Software Engineering (ASE: 2001), Empirical Software Engineering (2008, 2010), European Journal of Operational Research (EJOR: 2000), IEEE Software (SOF: 2005, 2008), Information Systems Frontiers (ISF: 2009), Information and Software Technology (IST: 2001, 2004-2011), Journal of Software Maintenance and Evolution: Research and Practice (JSME: 2010), Journal of Systems and Software (JSS: 1999-2008, 2011), Journal of Web Engineering (JWE: 2009), Software Process: Improvement and Practice (SPIP: 2002-2009), Software Quality Journal (SQJ: 2005), IEEE Transactions on Software Engineering (TSE: 2002-2004, 2010-2011)
- Evaluator of research proposals for the Cyprus Research Promotion Foundation (RPF), "Information
- Technologies" Action of the "Information and Communication Technologies" Programme (2011)
- Appointed Assessor of European Union research projects in the area of Life Long Learning
- (LLP/Key Activity 3 ICT / 2010-2012)
- Appointed evaluator of European Union research proposals in the area of Life Long Learning (LLP/Key Activity 3 – ICT 2008, 2009, and 2011 selection)
- Reviewer of a SFI (Science Foundation Ireland) Principal Investigator Programme grant application (2008)
- Reviewer in the joint ACM/IEEE initiative for developing a Computing Curriculum in Software Engineering (CCSE) Volume, 2002
- Tutorial & workshop presenter on topics related to software quality engineering and process simulation: ESCOM (2000), IASTED-SE (2005), PROFES (2000-2002, 2004), QW (1999), SEKE (2000), SPI (1999), SQM (2002-2004)
- Member of Advisory Committee of the Int'l Conf. on Computing & Informatics, Kuala Lumpur, Malaysia (ICCI 2006)

- **Invited participant of panel sessions**: "Do we really need decision support in software engineering?" (SEKE 2004), "Addressing the Divide between Practice and Research" (Metrics 2003)
- Organizer and chair of panel session "Corporate Software Engineering Knowledge Networks. How Can They Improve Training of the Workforce in Software Organisations?" (PROFES 2000)
- Teaching (undergraduate students): ETSF01: Software Engineering Process Economy and Quality, 03/2011 05/2011 and 03/2012 05/2012, Lund University, Sweden, SENG 421: Software Metrics, 09/2007 12/2007, University of Calgary, Canada, ENCM 369: Computer Organization, 01/20 07 04/2007, University of Calgary, Canada SENG 421: Software Metrics, 09/2006 12/2006, University of Calgary, Canada, SENG 443: Software Architecture, 09/2005 12/2005, University of Calgary, Canada, Databases I, 10/2004 12/2005, University of Applied Sciences Worms, Germany Software Management, 11/2001 12/2001, University of Applied Sciences Kaiserslautern-Zweibrücken, Germany
- Teaching (graduate students): ETS200: Software Testing, 01/2012 03/2012 and 01/2011 03/2011, Lund University, Sweden, INF 5181: Process Improvement and Agile Methods in Systems Development, 09/2011 12/2011, University of Oslo, Norway, ETS170: Requirements Engineering, 10/2011 12/2011 and 10/2010 12/2010, Lund University, Sweden, Experimentation (PhD Course), 03/2011 06/2011, Lund University, Sweden, INF 5180: Software Product and Process Improvement in Systems Development, 01/2010 05/2010, 01/2009 05/2009, and 01/2008 05/2008, University of Oslo, Norway, ENSF 619.01: Software Process Dynamics Advanced Simulation and Optimization Techniques, 09/2007 12/2007, University of Calgary, Canada, SENG 607.20: Software Process Modeling and Simulation, 01/2007 04/2007, University of Calgary, Canada, SENG 609.35: Software Process Simulation Modeling and Application, 07/2006 08/2006, University of Calgary, Canada, SENG 609.35: Software Process Simulation Modeling and Application, 10/2003 12/2003, University of Calgary, Canada
- Supervision: 1 PhD student, 6 Master students
- Examiner: 11 PhD students, 16 Master students
- **Teaching Assistant**: University of Southern California, Los Angeles, USA (Fall Term 1984), University of Ulm, Germany (1982-1986)

## Memberships

- Association for Computing Machinery (ACM) Senior Member
- Institute of Electrical and Electronics Engineering (IEEE Computer Society) Member
- Institute for Mathematics and its Applications (IMA) Member, Chartered Mathematician

### **Publications**

Books: 1

Proceedings: 9

Book Chapters (refereed): 8

• Journal Articles (refereed): 19

Conference Papers (refereed): 43

• Workshop Papers (refereed): 18

Journal Articles and Book Chapters (not refereed): 9

Technical Reports: 40

· Guest Editorials: 3

Tutorials and Workshop Seminars: 15

### Languages

German: fluent (mother tongue)

English: fluent

Spanish: good command (reading, writing, and speaking)

French & Italian: solid basics (good reading skills and ability to conduct simple conversations)

Norwegian & Swedish: beginner (satisfactory reading skills, rudimentary conversation skills)