



Curriculum Vitae

Ralf Lämmel

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Abstract

- Section 1 collects **basic metadata** about me.
- Section 2 itemizes my **academic CV** on the timeline.
- Section 3 itemizes **research collaborations**.
- Section 4 discusses **project funding**.
- Section 5 itemizes **supervision of PhD students**.
- Section 6 discusses experiences in **academic administration**.
- Section 7 discusses experiences in **scientific functions**.

1 Basic Metadata

Private address

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Academic address

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Private situation

Born on 15 December 1968 in Chemnitz, Germany.
Married to Olga Zagovora (researcher in computational social science at GESIS).
Two adult children and one 14-years old child from previous relationship.

2 Academic CV

2017-2020: Software Engineer in R&D at Facebook, London, UK

2007-: Full Professur in Computer Science, University of Koblenz-Landau

2005-2007: Program Manager R&D, Microsoft, Redmond, WA, USA

2001-2004: Assistant Professor in Software Engineering at VU Amsterdam, NL

2001-2004: Senior Researcher at CWI, Amsterdam, NL

1999-2000: Postdoc at CWI, Amsterdam, NL (Center of CS and Mathematics)

1993-1998: Dissertation in theory of programming at University of Rostock

1988-1993: Diploma of computer science at University of Rostock

1985-1987: Matriculation examination (Abitur Ostseegymnasium Rostock)

Extended visits (during sabbaticals or semester breaks) over the last 10 years:

- University of L'Aquila, Italy (visiting Prof. Alfonso Pierantonio)
- Chalmers, Sweden (visiting Prof. Thorsten Berger)
- University of Bergen, Norway (visiting Prof. Anya Bagge & Prof. Magne Haveraaen)
- University of Alabama, USA (visiting Prof. Jeff Gray)
- University of Waterloo, Canada (visiting Prof. Krzysztof Czarnecki)
- INRIA - École des Mines de Nantes, France (visiting Prof. Jordi Carbot)
- VU, Brussels, Belgium (visiting Prof. Wolfgang De Meuter et al.)
- University of Kent, UK (visiting Prof. Simon Thompson)
- CWI, Amsterdam, NL (visiting Prof. Paul Klint & Prof. Jurgen Vinju)
- University of Bern, Switzerland (visiting Prof. Oscar Nierstrasz)

3 Selected Research Collaborations

Prof. Thorsten Berger (Chalmers) We collaborate on the research topic of software variability. For instance, we have a corresponding joint ICSE 2021 paper. I have spent two months in Bergen during my latest sabbatical.

Prof. Mathieu Acher (Université of Rennes 1) We collaborate on ontology engineering. In particular, we have published together and Prof. Mathieu Acher has also hosted my PhD student Marcel Heinz for a research visit.

Prof. Anya Bagge (Universität Bergen) We collaborate on software language engineering research and teaching. For example, we have co-authored a paper on experiences with courses on the subject and I have served on several committees in Bergen.

Prof. Krzysztof Czarnecki (University of Waterloo) We have collaborated on the research topics of software variability and bidirectional transformation. I have spent several weeks in Waterloo during a sabbatical and have served on several committees there.

Dr. Darius Blasband (CEO Raincode) We have collaborated on the research topics of language migration and software language engineering and I serve as a consultant for the company.

Prof. Alfonso Pierantonio (University of L'Aquila) I have worked at the department for several months as a visiting professor and we have collaborated on model-driven engineering. We have served on each other's PhD committees.

Prof. Jeff Gray (University of Alabama) I have been working at the department for about a month as a visiting professor and we have collaborated on model-driven engineering. I have served on a PhD committee.

Prof. Steffen Staab (University of Stuttgart) We have been collaborating over several years now on the connection between semantic web and programming languages, also subject to jointly funded projects by Microsoft and DFG (German National Science Foundation).

Prof. Coen De Roover (Free University, Brussels) We have carried out joint research on program comprehension and I have served multiple times on thesis committees in Brussels, also in connection with several other professors at the same institute.

Prof. Simon Thompson (University of Kent & IOHK) We have collaborated on software/program transformation. I have been working at the department for several weeks as a visiting professor. I have served on two PhD committees.

Prof. Paul Klint and Prof. Jurgen Vinju (CWI, Amsterdam) The

CWI was my most forming institution during PostDoc times and I am incredibly thankful that I am able to come back every now and then, during sabbaticals, for PhD thesis committees, or otherwise.

Additional collaborators: Prof. Chris Verhoef, Prof. Dragan Gasevich, Prof. Jim Cordy, Prof. Andreas Winter, Prof. Jean-Marie Favre, Prof. Jean Bezivin, Prof. Mario Südholt, Prof. Vadim Zaytsev, Dr. Erik Meijer, Prof. Mark Harman, Prof. Jácome Cunha, Prof. João Paulo Fernandes, Prof. João Saraiva, Prof. Walid Taha, Prof. Joost Visser, Prof. Oscar Nierstrasz, Prof. Eelco Visser, Prof. Wiliam R. Cook, Dr. Frédéric Jouault, Prof. Jordi Cabot, Prof. Davide Di Ruscio, Dr. Juri Di Rocco.

4 Past and Ongoing Project Funding

Rationale

On my professorship in Koblenz I typically have 2 PhD students (in fact, a bit less) through basic funding.

My funding approach is focused on fundamental research – such as the project type that is funded by national science foundations. In the past, I have received grants from the Dutch (NWO) and the German (DFG) national science foundations and I have served on funding reviewing committees for the US, the Dutch, the Belgian, the German and yet other national science foundations. In some cases, I also carry out more applied research.

I have been receiving funding also through the state-level ministry of education (BM RLP – 'Bildungsministerium Rheinland-Pfalz'). Further, I have been receiving initial research funding from the university, e.g., in the context of building a DFG-funded research school.

I have been participating unsuccessfully in a large EU project proposal and I am not convinced that this project type is compatible with my approach to research.

My academic career is being interleaved with episodes in R&D in industry. Two research projects in industry under my sole leadership (one at Microsoft, another at Facebook) are included below in terms of head count and duration.

I also tend to secure significant funding through consultancy as well as funding for mobility in research. Such funding is not included below. In the following list, I also exclude any funding for teaching-oriented positions I received, even though such funding often supports PhD students, to some extent.

In the following list, all projects are quantified in terms of numbers of PhD students or full-time employees. My PhD students in Germany and the Netherlands are always fully employed scientific assistants.

Projects

2021-: Project proposal *to be submitted*. DFG scientific network on the topic of trustworthiness in data intelligence systems. 1 PhD student for 3 years per network member.

2021-2024: DFG project proposal *under review* since October 2020. ‘Scopes in Knowledge Graphs: Representation, Querying, and Programming’. Joint proposal with Prof. Steffen Staab, University of Stuttgart. 2 PhD students for 3 years, i.e., 1 PhD student per principal co-investigator.

2019-2020: Project in R&D at Facebook. ‘Ownership Management’ (see John Ahlgren, Maria Eugenia Berezin, Kinga Bojarczuk, Elena Dulskyte, Inna Dvortsova, Johann George, Natalija Gucevska, Mark Harman, Shan He, Ralf Lämmel, Erik Meijer, Silvia Saporá, and Justin Spahr-Summers. Ownership at large: Open problems and challenges in ownership management. In *ICPC ’20: 28th International Conference on Program Comprehension, Seoul, Republic of Korea, July 13-15, 2020*, pages 406–410. ACM, 2020). Project lead. 2+ software engineers for 1+ year.

2018-2020: DFG project. ‘Language Integrated Semantic Queries’. Joint project with Prof. Steffen Staab, University of Koblenz-Landau. 2 PhD students for 3 years, i.e., 1 PhD student per principal co-investigator.

2016-2020: BM RLP project. ‘Online Excellence’. 2 PhD students for 4 years.

2012-2014: Microsoft Research Funding. ‘Semantic data access with type providers’. Joint project with Prof. Steffen Staab, University of Koblenz-Landau. 1 PhD student for 2 years.

2008-2012: Initial research funding for an international DFG graduate school ‘ADAPT’. Joint project with Prof. Ulrich Furbach, University of Koblenz-Landau. 2 PhD students for 4 years.

2007–2012: Research funding by Krupp Stiftung (Krupp Foundation). 1 PhD student for 2 years, also subject to matching by university.

2006-2007: Project in R&D at Microsoft. ‘Schema-aware XML to Object Mapping’ (see Ralf Lämmel. LINQ to XSD. In *PLAN-X 2007, Programming Language Technologies for XML, An ACM SIGPLAN Workshop colocated with POPL 2007, Nice, France, January 20, 2007*, pages 95–96, 2007). Project lead. 2+ software engineers for 1+ year.

2004-2007: NWO project. ‘Language-parametric program transformation’. Principal investigator. 2 PhD students for 4 years.

5 Supervision of PhD Students

In addition to the theses listed below, I have served in 30+ thesis committees nationally and internationally.

Completed theses

- 2020: Martin Leinberger, Uni. of Koblenz-Landau: ‘semantic data queries’
- 2017: Andrei Varanovich, Uni. of Koblenz-Landau: ‘software chrestomathies’
- 2014: Ekaterina Pek, Uni. of Koblenz-Landau: ‘language usage analysis’
- 2010: Vadim Zaytsev, VU Amsterdam, NL: ‘grammarware engineering’
- 2009: Markus Kaiser, TU Darmstadt: ‘program verification’
- 2003: Joost Visser, CWI, NL: ‘software analysis and transformation’

Ongoing theses

- Marcel Heinz, Uni. of Koblenz-Landau: ‘knowledge integration’
- Johannes Härtel, Uni. of Koblenz-Landau: ‘mining software repositories’
- Hakan Aksu, Uni. of Koblenz-Landau: ‘API developer experience’
- Philipp Seifer, Uni. of Koblenz-Landau: ‘language integration’

6 Academic Administration

I focus here on the last few years and generally more significant appointments. I have very intensively worked in administrative duties and I enjoy this work and I see the value of it. In particular, in the following list, I do not include regular duties such as serving as member of appointment committees, exam boards, curriculum re-accreditation committees, and yet others.

- Since December 2020: Dean of Faculty of Computer Science with 25 professors and about 60 PhD students.
- 2017-2018: Senator, University of Koblenz-Landau; termination because of unpaid leave due to Facebook R&D appointment.
- 2014–2017: Dean of Faculty of Computer Science with 25 professors and about 60 PhD students.
- 2013–2014: Head of exam board; termination due to assumption of dean position.
- Prior to 2013, I was heading the Institute of Computer Science (7 professors) and the Institute of Software Engineering (3 professors), each of the institutes for several years.

7 Selected Scientific functions

In the following selection, regular memberships in program committees or not so recent functions as chairs (steering, program, organization) are not mentioned. I also exclude more sporadic relationships with journals. I completely omit workshop-type functions.

- Founder Software Language Engineering Conference (SLE) — I co-created the conference series in 2008 and I have been in the founding steering committee. I had been off the SC for several years now and I reentered recently, as a result of being the general chair of the 2020 edition. I also served as the keynote speaker of the 2019 edition.
- Founder GTTSE Summer School Series — I co-created this influential summer school in 2005 and I have taken the lead on several editions in terms of the scientific programme. The school is currently inactive, but I am discussing with collaborators the school's rebirth in the post-Corona period. Much of the school's aspiration has been continued in the SLE conference and the SLEBOK effort including a corresponding Dagstuhl seminar.
- Steering Committee Implementation and Application of Functional Languages (IFL) — I have been involved in organizing editions of the conference and specifically I also served as a general chair of one instance. I will retire from the SC eventually, per the rules of SC renewal.
- Editorial Board Science of Computer Programming — I have been working with the journal several years until 2017.
- Steering Committee International Conference on Program Comprehension (ICPC) — I have also been engaged with this conference as a chair and as a community member. In 2020, I returned as a keynote speaker and industry paper author.
- Steering Committee Software Analysis, Evolution and Reengineering (SANER) — I have also been engaged with this conference as a chair and as a community member. In fact, I have been a co-founder of SANER, as the successor of WCRE (and CSMR).
- Co-organizer of 2 Dagstuhl seminars — I have been organizing a seminar on software transformations (2006) as well as a seminar on the body of knowledge in software language engineering (2017).
- EAPLS PhD Award committee member for several years.