

# ALEXANDER KOLLER

July 2015

Focus Area Cognitive Sciences  
University of Potsdam  
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## PROFESSIONAL EXPERIENCE

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| since 04/11   | <b>Professor (W3)</b> of Theoretical Computational Linguistics, University of Potsdam.  |
| 08/08–03/11   | <b>Head</b> , Research group “Efficient algorithms in computational linguistics” within the Cluster of Excellence, Saarland University. |
| 09/06 – 07/08 | <b>DFG Research Fellow</b> , Columbia University and University of Edinburgh.   |
| 05/99 – 08/06 | <b>Wissenschaftlicher Mitarbeiter</b> , Department of Computational Linguistics and Phonetics, Saarland University.                     |

## EDUCATION

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| 1999 – 2004 | <b>Dr. rer. nat. (Ph.D.), Computer Science</b> , Saarland University<br>Dissertation: <i>Constraint-based and graph-based resolution of ambiguities in natural language</i><br>Advisors: Manfred Pinkal and Gert Smolka<br>Grade: <i>summa cum laude</i> |
| 1994 – 1999 | <b>Diplom in Computational Linguistics</b> , Saarland University<br>Grade: 1.0   |
| 1994 – 1999 | <b>Diplom in Computer Science</b> , Saarland University<br>Grade: 1.0  |
| 1996        | <b>Vordiplome</b> in Computational Linguistics, Computer Science, and Mathematics  |

## GRANTS

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| 2014 – 2017 | <b>DFG project</b> “Efficient statistical parsing and decoding for expressive grammar formalisms using tree automata”. |
| 2012 – 2015 | <b>Principal Investigator</b> : “Structuring information in interactive natural language generation” (within SFB 632). |

- 2006 – 2008      **DFG Research Fellowship:** “CRISP: Efficient integrated realization and microplanning”.
- 2005 – 2007      **Principal Investigator:** “CHORUS: Integrated Linguistic Processing with Constraints and Preferences” (within SFB 378, with Manfred Pinkal and Gert Smolka).

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#### SCHOLARSHIPS AND AWARDS

- 2012              **Best paper award**, 13th International SIGdial Meeting on Discourse and Dialogue (SIGDIAL).
- 2008              **Best paper award**, SPARK-08: The ICAPS-08 Scheduling and Planning Applications Workshop.
- 2001 – 2004      **Associated member**, International Research Training Group “Language technology and cognitive systems”: Joint PhD program between Saarland University and the University of Edinburgh.
- 2001              **Best presentation award**, Third International Workshop on Inference in Computational Semantics (ICoS).
- 1997 – 1999      **Scholarship**, Studienstiftung des deutschen Volkes.

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#### PROFESSIONAL SERVICE

- 2015              **General Chair** of the 16th Annual SIGdial Meeting on Discourse and Dialogue (SIGDIAL)
- 2014              **Publications Chair** of the 52nd Annual Meeting of the ACL (with Yusuke Miyao)
- since 2012      **Action editor**, *Transactions of the ACL*
- since 2007      **Board member**, ACL Special Interest Group on Computational Semantics (SIGSEM); in 2007–2010 as Secretary
- 2011–2014      **Advisory board**, European Chapter of the ACL (EACL)
- 2013              **Co-Chair** (local chair) of the 10th International Conference on Computational Semantics (IWCS; with Katrin Erk)
- 2013              **Area Chair** for Generation and Summarization, 51st Annual Meeting of the ACL (with Ani Nenkova)
- 2012              **Area Chair** for Semantics, 13th Conference of the European Chapter of the ACL (EACL; with Sebastian Pado)
- 2009–2011      **Editorial board**, *Computational Linguistics*

2008–2011	<b>Member</b> , Selection committee for the E. W. Beth Dissertation Prize (awarded by the European Association for Logic, Language, and Information)
2008–2011	<b>Organizing committee</b> , Challenge on Generating Instructions in Virtual Environments (GIVE)
2007	<b>Senior PC member</b> , Human Language Technologies: The Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL-HLT 2007)
2006	<b>PC co-chair</b> , Fifth International Workshop on Inference in Computational Semantics (with Johan Bos)

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#### ACADEMIC SERVICE

since 2014	<b>Deputy speaker</b> , Research Focus Cognitive Sciences, University of Potsdam
since 2014	Responsible for study program <b>MSc Cognitive Systems: Language, Learning, and Reasoning</b> , University of Potsdam
since 2012	<b>Member</b> , Fakultätsrat, Humanwissenschaftliche Fakultät, University of Potsdam
2011–2015	<b>Head of department</b> , Department of Linguistics, University of Potsdam (2011–2012 as acting head of department)
2008–2011	<b>Representative</b> of the junior research group heads, Cluster of Excellence MMCI, Saarland University
1995–1998	<b>Student representative</b> (Fachschaftsrat), Department of Computational Linguistics and Phonetics, Saarland University

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#### ADVISING

current	Jonas Groschwitz, Joint PhD in Computational Linguistics, University of Potsdam and Macquarie University: “Efficient statistical parsing using tree automata” (co-supervised with Mark Johnson; expected completion in 2018)
current	Nikos Engonopoulos, PhD in Computational Linguistics, University of Potsdam: “Statistical generation of effective instructions” (expected completion in 2016)
current	Martin Villalba, PhD in Computational Linguistics, University of Potsdam: “Generation of effective feedback in interactive natural language generation” (expected completion in 2016)
2013	Konstantina Garoufi, PhD in Linguistics, University of Potsdam: “Interactive generation of effective discourse in situated context”

2013	Michaela Regneri, PhD in Computational Linguistics, Saarland University: “Event structures in knowledge, pictures, and text”
external reviewer	<i>Sina Zarrieß</i> (U Stuttgart, 2015); <i>Bevan Jones</i> (U Edinburgh, 2015); <i>Matt-hias Büchse</i> (TU Dresden, 2014); <i>Ruud Koolen</i> (U Tilburg, 2013); <i>Luciana Benotti</i> (U Nancy, 2010).
MSc advising	<i>Kira Eberle</i> (Potsdam, 2013): “Joint optimization of generating route instructions and referring expressions”. <i>Thutrang Nguyen</i> (Potsdam, 2012): “Tree adjoining grammars as interpreted regular tree grammars”. <i>Markus Dräger</i> (Saarbrücken, 2012): “Generation of in-car navigation instructions”. <i>Olga Nikitina</i> (Saarbrücken, 2011): “Attribute selection with reinforcement learning”. <i>Daniel Bauer</i> (Saarbrücken, 2009): “Generation with statistical grammars as planning”. <i>Etienne Ailloud</i> (Saarbrücken, 2007): “Glue semantics as dominance constraints”.
BSc advising	<i>Johannes Gontrum</i> (Potsdam, 2015): “State-splitting for IRTGs”. <i>Alisa Lisovskaya</i> (Potsdam, 2015): “Designing an Infrastructure for Crowdsourcing Experiments with a Dialog System”. <i>Melanie Tosik</i> (Potsdam, 2015): “String to Semantic Graph Alignment”. <i>Danilo Baumgarten</i> (Potsdam, 2013): “Maximum-Entropie-Modelle für interpretierte reguläre Baumgrammatiken”. <i>Sarah Hemmen</i> (Potsdam, 2013): “Binarisierung von interpretierten regulären Baumgrammatiken”. <i>Philip Gorinski</i> (Saarbrücken, 2011): “A bimorphism approach to training tree transducers”. <i>Boris Fersing</i> (Saarbrücken, 2010): “High-level navigation instructions for GIVE-2”. <i>Michaela Regneri</i> (Saarbrücken, 2006): “VerbOzean - Maschinelles Lernen von semantischen Relationen zwischen deutschen Verben”.

## INVITED TALKS

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July 2015	“Interactive Natural Language Generation”. PRAGSales Meeting, ZAS, Berlin.
September 2014	“Interpreted Regular Tree Grammars”. 24. Jahrestreffen der GI-Fachgruppe Automaten und Formale Sprachen, Caputh.
August 2014	“Interactive Natural Language Generation”. RefNet Summer School on Psychological and Computational Models of Language Production, Edinburgh.
July 2012	“Interactive Natural Language Generation in Virtual Environments”. Young Researchers’ Roundtable on Spoken Dialogue Systems, Seoul.
July 2011	“The GIVE Challenge”. UCNLG+Eval workshop, Edinburgh.
February 2011	“Lessons from the Challenge on Generating Instructions in Virtual Environments”. Workshop on Benchmarking and Evaluation of Interactive Cognitive Systems, Bielefeld.

- August 2007 “Some thoughts about a computational semantics for the 21st century”. Evening lecture, ESSLLI, Dublin.
- June 2007 “Semantics and Inference: The computational semantics perspective”. Panel discussion on semantics and inference, SemEval workshop, Prague.
- January 2005 “Towards a Grand Unified Theory of Underspecification”. Sixth International Workshop on Computational Semantics (IWCS-6), Tilburg.
- September 2003 “Applying Description Logic: Natural Language Interaction with a Computer Game”. Description Logic Day, Nancy Inference Week.
- June 2001 “Put the galakmid into the slot then kick the dispenser: Computational Linguistics and Theorem Proving in a Computer Game”. Third International Workshop on Inference in Computational Semantics (ICOS-3), Siena.
- August 2000 “A Polynomial-Time Fragment of Dominance Constraints”. Workshop on Trees in Logic, Computer Science, and Linguistics. ESSLLI, Birmingham.

#### TEACHING

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See my website for up-to-date information.

#### PUBLICATIONS

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See my website for up-to-date information.