

# Umesh Patil

IdSL-I, University of Cologne  
50923 Cologne, Germany  
[umesh.patil@gmail.com](mailto:umesh.patil@gmail.com)  
<https://u-p.github.io/>

---

## RESEARCH INTERESTS

Pronoun resolution, cognitive modeling, interaction of language and memory

## EDUCATION

2006 – 2012	<b>PhD</b> in Cognitive Science, University of Potsdam, Germany
1999 – 2001	<b>MSc</b> in Computer Science, University of Mumbai, India
1996 – 1999	<b>BSc</b> in Mathematics, University of Mumbai, India

## TRAINING

Summer 2018	Machine Learning for Language Processing, University of Cologne
Summer 2017	Bayesian Modeling for Cognitive Science, University of Amsterdam
Spring 2016	Spring School on Cognitive Modeling, University of Groningen

## POSITIONS

November 2017 – Now	Researcher at the Institute of German Language and Literature I, University of Cologne, Germany
June 2019 – October 2020	Researcher at Germanistik — Linguistik, University of Wuppertal, Germany
July 2017 – September 2017	Data scientist (intern), Mapegy, Berlin, Germany
April 2014 – March 2017	Researcher in the Computational Linguistics Group, Institute of Cognitive Science, Osnabrück University, Germany
December 2005 – September 2013	Researcher in the Department of Linguistics, University of Potsdam, Germany
July 2003 – November 2005	Research engineer in the Department of Computer Science & Engineering, IIT Bombay, India
June 2002 – March 2003	Visiting lecturer for the MSc in Computer Science in the Department of Computer Science, University of Mumbai, India
June 2001 – March 2002	Visiting lecturer for the BSc in Computer Science in Mithibai College, University of Mumbai, India

---

---

## PUBLICATIONS

### Articles

- Umesh Patil**, Stefan Hinterwimmer. (*in prep*). Binding options of German demonstrative pronouns: a large-sample study and computational models.
- Stefan Hinterwimmer and **Umesh Patil**. 2022. The interpretative options of anaphoric complex demonstratives. *Glossa: A Journal of General Linguistics*. 7(1), 14. <https://doi.org/10.16995/glossa.5700>.
- Umesh Patil** and Sol Lago. 2021. Prediction advantage as retrieval interference: an ACT-R model of processing possessive pronouns. In Stewart, T. C. (Ed.). *Proceedings of the 19<sup>th</sup> International Conference on Cognitive Modeling* (pp. 213-219). University Park, PA: Applied Cognitive Science Lab, Penn State. <https://mathpsych.org/presentation/625>
- Stefan Hinterwimmer, **Umesh Patil** and Cornelia Ebert. 2021. On the interaction of gestural and linguistic perspective taking. *Frontiers in Communication*. <https://doi.org/10.3389/fcomm.2021.625757>.
- Stefan Hinterwimmer, Andreas Brocher and **Umesh Patil**. 2020. Demonstrative Pronouns as Anti-Logophoric Pronouns: An Experimental Investigation. *Dialogue & Discourse*. 11(3): 110-127. <https://doi.org/10.5087/dad.2020.204>.
- Umesh Patil**, Peter Bosch, and Stefan Hinterwimmer. 2020. Constraints on German *dieser* demonstratives: language formality and subject-avoidance. *Glossa: A Journal of General Linguistics*. 5(1), 14. <http://doi.org/10.5334/gjgl.962>.
- Umesh Patil**, Shravan Vasishth, and Richard L. Lewis. 2016. Retrieval interference in syntactic processing: The case of reflexive binding in English. *Frontiers in Psychology*. 7:329. <https://doi.org/10.3389/fpsyg.2016.00329>.
- Umesh Patil**, Sandra Hanne, Frank Burchert, Ria De Bleser, and Shravan Vasishth. 2016. A computational evaluation of representational and processing accounts of aphasia. *Cognitive Science*. 40(1): 5–50. <https://doi.org/10.1111/cogs.12250>.
- Umesh Patil**, Shravan Vasishth and Reinhold Kliegl. 2009. Compound effect of probabilistic disambiguation and memory retrievals on sentence processing: Evidence from an eye-tracking corpus. *Proceedings of the 9<sup>th</sup> International Conference on Cognitive Modeling*, Manchester, UK. <https://u-p.github.io/papers/PatilEtAl-iccm2009.pdf>
- Marisa Ferrara Boston, John Hale, Reinhold Kliegl, **Umesh Patil** and Shravan Vasishth. 2008. Parsing costs as predictors of reading difficulty: An evaluation using the Potsdam Sentence Corpus. *Journal of Eye Movement Research* 2(1): 1–12. <https://doi.org/10.16910/jemr.2.1.1>
- Umesh Patil**, Gerrit Kentner, Anja Gollrad, Frank Kügler, Caroline Fery and Shravan Vasishth. 2008. Focus, word order and intonation in Hindi. *Journal of South Asian Linguistics* 1(1): 55–72. <https://ojs.ub.uni-konstanz.de/jsal/index.php/jsal/article/view/3>

### Selected conference talks and posters

- Umesh Patil**, Stefan Hinterwimmer, and Petra B. Schumacher. 2022. Evaluative expressions influence prominence: effects on *die* and *diese* pronouns. Talk at the 3<sup>rd</sup> International Conference “Prominence in Language”, University of Cologne, Cologne.
- Umesh Patil** and Sol Lago. 2020. How antecedent retrieval influences prediction: a cue-based retrieval model. Poster presentation at the 26<sup>th</sup> Annual Conference on AMLaP, Potsdam, Germany.

- 
- Umesh Patil** and Stefan Hinterwimmer. 2020. Binding options of German demonstrative pronouns: a large-sample study and a computational model. Poster presentation at the 33<sup>rd</sup> Annual Meeting of the CUNY Conference on Human Sentence Processing, Amherst, MA, USA.
- Umesh Patil**, Sara Meuser, and Stefan Hinterwimmer. 2019. The logophoricity constraint on German demonstrative pronouns. Poster presentation at the 21<sup>st</sup> Conference of the European Society for Cognitive Psychology (ESCoP), Tenerife, Spain.
- Umesh Patil** and Stefan Hinterwimmer. 2018. Can German demonstrative pronouns really be bound? Poster presentation at the 24<sup>th</sup> Annual Conference on AMLaP, Berlin, Germany.
- Umesh Patil**, Peter Bosch, and Stefan Hinterwimmer. 2017. Do German demonstrative pronouns avoid perspectival centers? Poster presentation at the 30<sup>th</sup> Annual Meeting of the CUNY Conference on Human Sentence Processing, Cambridge, MA, USA.
- Umesh Patil**, Peter Bosch, and Lea Penning. 2015. Intra-sentential referential behaviour of German demonstratives. Poster presentation at the 21<sup>st</sup> Annual Conference on AMLaP, Malta.
- Umesh Patil**, Sandra Hanne, Shravan Vasishth, Frank Burchert, and Ria De Bleser. 2013. Evaluating the Trace Deletion Hypothesis and processing deficit accounts: a computational modeling approach. Talk at the 51<sup>st</sup> Annual Meeting of the Academy of Aphasia, Lucerne, Switzerland.
- Umesh Patil**, Sandra Hanne, Shravan Vasishth, and Frank Burchert. 2013. Modeling individual differences in processing deficits in aphasia. Poster presentation at the 26<sup>th</sup> Annual Meeting of the CUNY Conference on Human Sentence Processing, Columbia, SC, USA.
- Umesh Patil**, Shravan Vasishth, and Richard Lewis. 2012. Early effect of retrieval interference on reflexive binding. Talk at the workshop ‘The timing of grammar: experimental and theoretical considerations’ at the 35<sup>th</sup> GLOW Colloquium, Potsdam, Germany.
- Umesh Patil**, Sandra Hanne, Shravan Vasishth, Frank Burchert, and Ria De Bleser. 2011. Modeling offline and online (eye movements) sentence comprehension in aphasia using the cue-based retrieval architecture. Talk at the 49<sup>th</sup> Annual Meeting of the Academy of Aphasia, Montréal, Canada.
- Umesh Patil**, Shravan Vasishth, and Richard Lewis. 2011. Are grammatical constraints immune to retrieval interference? Talk at the 10<sup>th</sup> International Symposium of Psycholinguistics, Donostia - San Sebastián, Spain.
- Umesh Patil**, Shravan Vasishth, and Richard Lewis. 2011. Early retrieval interference in syntax-guided antecedent search. Talk at the 24<sup>th</sup> Annual Meeting of the CUNY Conference on Human Sentence Processing, Stanford, USA.
- Umesh Patil**, Marisa Ferrara Boston, John T. Hale, Shravan Vasishth, and Reinhold Kliegl. 2009. The interaction of surprisal and working memory cost during reading. Poster presentation at the 22<sup>nd</sup> Annual Meeting of the CUNY Conference on Human Sentence Processing, UC Davis, USA.
- Umesh Patil**, Shravan Vasishth, Brian Bartek, and Richard Lewis. 2008. The Interplay of Locality and Surprisal. Poster presentation at the 21<sup>st</sup> Annual Meeting of the CUNY Conference on Human Sentence Processing, UNC, Chapel Hill, USA.
-

---

## INVITED TALKS

**January 2022** Linguistischer Arbeitskreis (LAK), University of Cologne  
A computational cognitive model of pronoun resolution

**June 2019** Empirisches Kolloquium, University of Cologne  
Can German demonstrative pronouns really be bound? A large-sample study

**November 2018** Department of Linguistics, University of Stuttgart  
Processing pronouns: integrating experimental and modeling approaches

**June 2018** (with Melanie Fuchs) SFB 1252, University of Cologne  
Two types of German demonstrative pronouns (*dieser* vs. *der*), two different views!

**February 2014** Institute of Cognitive Science, Osnabrück University  
Retrieval interference in reflexive binding

**May 2011** EMCL, Department of Linguistics, University of Potsdam  
Cognitive modeling of impaired and unimpaired sentence processing

## TEACHING

1. Processing pronouns — from theory to experiment design  
(summer 2022)
2. Eye-tracking workshop (co-taught)  
(March 2022, University of Lisbon)
3. Introduction to analysis of linguistic data with R  
(winter 2021–22, 2016–17, 2014–15)
4. Experiment design and practice  
(summer 2021, 2020, 2019)
5. Cognitive modeling in linguistics  
(summer 2016)
6. Linguistic theory and cognition (co-taught)  
(summer 2016, 2015)
7. Pronouns (co-taught)  
(winter 2015–16)

## SKILLS

**Programming** R, Python, MATLAB, Java, C, C++, Perl, AWK, Bash, SQL

**Software** ACT-R, PCibex, Praat, Presentation

**Operating systems** OS X, Unix/Linux, Windows

**Languages** Marathi (native), Hindi (native), English (fluent), German (B1–B2)

## ACADEMIC SERVICE

**Ad hoc reviewer** *Glossa*; *PLOS ONE*; *Journal of Experimental Psychology*; *Language, Cognition and Neuroscience*; *Second Language Research*; *Applied Psycholinguistics*; *Languages*; *HSP* (2022); *AMLaP* (2019, 2020, 2021); *EAPCogSci* 2015

**Member of the editorial board** *Journal of South Asian Linguistics*

## PERSONAL DETAILS

**Nationality** Naturalized German

---