

Kristina Striegnitz
(Version 5/2019)

Union College
Computer Science Department
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Education	PhD Saarland University and Université Henri Poincaré Thesis: <i>Generating Anaphoric Expressions: Contextual Reasoning in Sentence Planning</i> Advisors: Claire Gardent and Manfred Pinkal Diplom (<i>Masters</i>) in Computational Linguistics Saarland University	Nov 2004 Jan 2000
Employment	Associate professor Computer Science Department, Union College Chair Computer Science Department, Union College Assistant professor Computer Science Department, Union College Post-doc ArticuLab, School of Communication, Northwestern University Ingénieur expert Équipe langue et dialogue, LORIA, Nancy, France Researcher Institute for Computational Linguistics, Saarland University	since Sep 2013 Sep 2018 – Aug 2021 Jul 2007 – Aug 2013 Jan – Dec 2005 Oct – Dec 2004 Jan 2000 – Jun 2004
Teaching	Can Computers Think?: Introduction to Computer Science (CSC 106) Union College, winter 2008, winter 2010, winter 2013, winter 2014, winter 2016, winter 2017, winter 2018, spring 2018, spring 2019 Game Development: Introduction to Computer Science (CSC 105) Union College, spring 2008, spring 2009, fall 2009, fall 2010, spring 2012, fall 2012, fall 2013, winter 2018 Programming on Purpose (CSC 120) Union College, fall 2018 Data Structures (CSC 150) Union College, spring 2013, winter 2015, winter 2016, spring 2016, fall 2016 Algorithm Design and Analysis (CSC 250) Union College, spring 2015 The Computer Science of Computer Games (CSC 245) Union College, fall 2008, fall 2011 Web Programming (CSC 240) Union College, fall 2009, fall 2012, fall 2015, fall 2017 Natural Language Processing (CSC 206) Union College, fall 2010, spring 2012, spring 2015, spring 2017	

Natural Language Processing Techniques (CSC 483)
 Union College, winter 2019

Artificial Intelligence (CSC 320)
 Union College, fall 2013, fall 2015, spring 2018

Theory of Computing (CSC 350)
 Union College, fall 2007, spring 2010, winter 2012, spring 2017

Digital Games for Social Change
 Union College, fall 2009, spring 2010

SRS: Data Analytics and Ethics
 Union College, winter 2012

Natural Language Generation for Embodied Conversational Agents
 ESSLLI 2008, Hamburg, Germany

Introduction to Computer Science - Labs
 Union College, fall 2007

Theories and Technologies for Human Communication
 co-taught with Justine Cassell, Northwestern University, fall 2005

Introduction to Natural Language Generation
 JALIMI 2004, Rosario, Argentina

Prolog programming: a do-it-yourself course for beginners
 ESSLLI 2004, Nancy, France

Introduction to Programming with Prolog
 Saarland University, summer 2001, 2002, and 2003

Algorithms for Natural Language Processing in Prolog
 Saarland University, winter 2001 and 2002

Software Project: Natural Language Processing in a Computer Game
 Saarland University, summer 2001

Awards	<p>DAAD (<i>German Academic Exchange Service</i>) grant for postdoctoral research</p> <p>Studienstiftung des deutschen Volkes (<i>German National Academic Foundation</i>) Scholarship for undergraduate studies</p>	<p>Jan – Dec 2005</p> <p>Nov 1993 – March 1999</p>
Other Research Experience and Education	<p>Research Visit, Sociable Agents Group, Center of Excellence Cognitive Interaction Technology Visit-Here-Or-There grant through the Skidmore-Union-Network Bielefeld University, Germany April 2011 – June 2011</p> <p>Research Visit, ICCS (Institute for Communicating and Collaborative Systems) University of Edinburgh, UK Oct 2001 – Dec 2001</p> <p>Undergraduate research assistant Saarland University Oct 1994 – July 1995, Oct 1996 – Dec 1999</p> <p>Internship, ATR (Advanced Telecommunication Research) Laboratories Kyoto, Japan July 1997 – Sept 1997</p>	

Japanese language studies

Tohoku University

Oct 1995 – Aug 1996

Professional Activities

Conference, Workshop and Shared Task Organization

- ACM-W New York Celebration of Women in Computing (NYCWIC), 2015, 2016 organizing committee member
- Natural Language Generation Challenge on Generating Instructions in Virtual Environments, co-organizer, 2009, 2010, 2011
- European Workshop on Natural Language Generation (ENLG) 2011, co-chair
- EMNLP 2011 Workshop on Language Generation and Evaluation (UCNLG+Eval), co-chair
- ESSLLI 2001 Student Session, program committee chair

Reviewing – conferences and workshops

ACL (2004, 2005, 2007, 2016, 2017, 2018, 2019), ACL Student Research Workshop (2003), brandial (2006), Coling (2005, 2010, 2014, 2016, 2018), EACL (2017), EACL Student Research Workshop (2014), EMNLP (2018), ENLG (2013), ESSLLI Student Session (2000 – 2004, 2008), HLT-NAACL (2006, 2010, 2012, 2018, 2019), IJCNLP (2005, 2008), INLG (2010, 2012, 2014, 2016, 2017, 2018), ITiCSE (2013), IVA (2007), MOG (2010), PacificVAST (2018), SIGdial (2007, 2013, 2014, 2015, 2016, 2017, 2018, 2019), SIGCSE (2012, 2013, 2014, 2015, 2016, 2017, 2018), Workshop on Speech and Multimodal Interaction in Assistive Environments at ACL (2012, 2014), Workshop on Human Computation in Digital Entertainment at AIIDE (2012), Workshop on Human Computation and Machine Learning in Games at HCOMP (2013)

Reviewing – journals

Member of the standing reviewer team for the Transactions of the Association for Computational Linguistics (2014-2020), ACM Transactions on Computing Education (2013), Applied Cognitive Psychology (2015), Artificial Intelligence Journal (2007), International Journal of Human-Computer Studies (2011), Journal of Discourse and Dialogue Research (2009), Journal on Multimodal User Interfaces (2011, 2013, 2017), Journal of Natural Language Engineering (2007), Language and Cognitive Processes (2012)

Reviewing – grants

- National Science Foundation panelist 2010, 2013, 2016
- National Science Foundation external reviewer 2008, 2009,
- European Science Foundation external reviewer 2007,
- SUNY Research Foundation panelist 2012

Reviewing – theses

- Puripant Ruchikachorn, PhD committee, Stony Brook University, 2016
- External reviewer for the Master's thesis of Shashi Narayan, University of Malta, 2011

Committees

- Special interest group for natural language generation (SIGGEN) of the Association for Computational Linguistics (ACL), board member (2011–2014)
- Generation Challenges Steering Committee, member (since 2010)

College Activities

Committees

- Library liaison committee, Union College, division 4 representative (2008–2011, 2018–2021)
- Union College General Education Board (2013–2016)
- Union College Faculty Review Board (2011–2012)
- Presidential Commission on the Status of Women, Union College, co-chair (2009–2011)

Department Service

- Computer Science helpdesk, faculty advisor (2015–2019)
- Seminar Series Coordinator: Computer Science Department, Union College (2007–2016), Institute for Computational Linguistics and Phonetics, Saarland University (2002 – 2004)
- Webmaster: Institute for Computational Linguistics and Phonetics, Saarland University (1999 – 2002)

Summer Research Students

David Annex (2018), Kwesi Blankson (2018), Caleb Seymour (2018), Nam Bui (2017), Bhuwan Gokhool (2017, 2018), Danielle Gregg (2017), Jonathan Kimber (2017), Elizabeth Ricci (2017), Yuan Gao (2016), John Enquist (2016), Venus Yu (2016), Kathleen Laliberte (2015), Peter Jacobo (2015), Logan Fine (2014), Julia Isaac (2014), Eric Rose (2014), Tristan Johnson (2014), Anthony Pham (2014), Anjali Smith (2014, 2015), Vaclav Honzik (2013), Andrew Danise (2012, 2013), Matthew Marchesani (2012), Clayton Marr (2012), Aviva Rutkin (2011), Christina Cervini (2011), Davis Barber (2010), Michael Lucey (2010), Kirk Winans (2010), Rachel Hogue (2009, 2010), Paul Tunison (2009), Petr Smejka (2009), Filip Majda (2008), Ondrej Panek (2008)

Senior Project Advisees

Emma White (2019), Miguel Rosendo (2019), Zhaoqi Yu (2019), Rory Bennett (2018), Varun Shah (2018), Kim Wellington (2018), Anna Ko (2017), Yuki Shimano (2017), Cameron Smith (2017), Tristan Johnson (2016), Kathleen Laliberte (2016), Anthony Pham (2016), Peter Davis (2015), Mark Khazanov (2015), Nahian Jahangir (2015), Hyung Yul Choi (2015), Shiqin Licia He (2014), Joseph Plaus (2014), Aaron Elkin (2013), Richard French (2013), Aviva Rutkin (2012, Neuroscience), Christina Cervini (2012, Neuroscience, with Steve Romero), Thomas DeFina (2012, CS and Classics ID, with Hans Mueller), Kirk Winans (2012, CS and Political Science ID, with Guillermina Seri), Alexander Likos (2010, CS), Carlon McPherson (2010, CS and Digital Art ID, with Fernando Orellana), David Sayles (2010, CS and Digital Art ID, with John Rieffel), Juneui Soh (2010, CS and Digital Art ID, with Fernando Orellana), Carley Jacobson (2010, CS and Digital Art ID, with Fernando Orellana), Daven Amin (2009, CS), Andrew Finley (2009, CS), Justin Fisher (2009, CS and Economics ID, with Stephen Schmidt), Zach Portman (2009, CS and Biology double major, with Steve Rice), Dana Cartwright (2008, CS and Math ID, with Davide Cervone), Leonard McAlister (2008, CS), Kenneth Woolson (2008, CS)

Outreach

- STEP workshops, fall 2010, winter 2018, summer 2011, 2012, 2013, 2017, 2018
- Competition site for the North American Computational Linguistics Olympiad (NACLO), 2012–2019

Publications

Theses

- Striegnitz, K. (2004). *Contextual Reasoning in Sentence Planning — Generating Anaphoric Expressions*. Ph. D. thesis, Universität des Saarlandes and Université Henri Poincaré.
- Striegnitz, K. (2000). On Modeling Meaning Shifts by Relaxing Underspecified Semantic Representations. Master's thesis, Saarland University.

Books

- Blackburn, P., J. Bos, and K. Striegnitz (2006). *Learn Prolog Now!*, Volume 7 of *Texts in Computing*. King's College, London, UK: College Publications. ISBN 1-904987-17-6. Companion web-site at www.learnprolognow.org.
- Blackburn, P., J. Bos, and K. Striegnitz (2007). *Prolog, tout de suite!*, Volume 1 of *Cahier de Logique et d'Epistémologie*. Translated by H. Manuélian. King's College, London, UK: College Publications.
- A Portuguese translation of Learn Prolog Now! is in preparation.*

Journal Articles

- Wall ('18), K., J. Stark ('17), A. Schillaci ('17), E. T. Saulnier, E. McLaren, K. Striegnitz, B. D. Cohen, P. J. Arciero, A. F. Kramer, and C. Anderson-Hanley (2018). The Enhanced Interactive Physical and Cognitive Exercise System (iPACESTM v2.0): Pilot Clinical Trial of an In-Home iPad-Based Neuro-Exergame for Mild Cognitive Impairment (MCI). *Journal of Clinical Medicine* 7(9).
- Anderson-Hanley, C., J. Stark ('17), K. M. Wall ('18), M. VanBrakle ('16), M. Michel ('16), M. Maloney ('15), N. Barcelos, K. Striegnitz, B. D. Cohen, and A. F. Kramer (2018). The interactive Physical and Cognitive exercise system (iPACesTM): effects of a 3-month in-home pilot clinical trial for mild cognitive impairment and caregivers. *Clinical Interventions in Aging* 13.
- Anderson-Hanley, C., M. Maloney ('15), N. Barcelos, K. Striegnitz, and A. Kramer (2017). Neuropsychological Benefits of Neuro-Exergaming for Older Adults: A Pilot Study of an Interactive Physical and Cognitive Exercise System (iPACES). *Journal of Aging and Physical Activity* 25(1), 73–83.
- Koller, A., R. Debusmann, M. Gabsdil, and K. Striegnitz (2004). Put my galakmid coin into the dispenser and kick it: Computational Linguistics and Theorem Proving in a Computer Game. *Journal of Logic, Language and Information: Special Issue on ICoS-3* 13, 187–206.
- Koller, A., J. Niehren, and K. Striegnitz (2000). Relaxing Underspecified Semantic Representations for Reinterpretation. *Grammars* 3(2-3), 217–241. Special Issue on MOL-6.
- Gabsdil, M. and K. Striegnitz (2000). Classifying Scope Ambiguities. *Journal of Language and Computation* 1(2), 307–313. Special Issue on ICoS-1.

Book Chapters

- Koller, A., K. Striegnitz, D. Byron, J. Cassell, R. Dale, J. Moore, and J. Oberlander (2010). The First Challenge on Generating Instructions in Virtual Environments. In E. Kraemer and M. Theune (Eds.), *Empirical Methods in Natural Language Generation*, Volume 5980 of *LNCs*. Springer.
- Striegnitz, K., P. Tepper, A. Lovett, and J. Cassell (2009). Knowledge Representation for Generating Locating Gestures in Route Directions. In K. Coventry, T. Tenbrink, and J. Bateman (Eds.), *Spatial Language in Dialogue*. Oxford University Press.
- Cassell, J., S. Kopp, P. Tepper, K. Ferriman, and K. Striegnitz (2007). Trading Spaces: How Humans and Humanoids use Speech and Gesture to Give Directions. In T. Nishida (Ed.), *Engineering Approaches to Conversational Informatics*. Wiley.

- Gardent, C. and K. Striegnitz (2007). Generating Bridging Definite Descriptions. In H. Bunt and R. Muskens (Eds.), *Computing Meaning*, Volume 3. Kluwer Academic Publishers.
- Gardent, C., H. Manuélian, K. Striegnitz, and M. Amoia (2004). Generating Definite Descriptions: Non incrementality, inference and data. In T. Pechman and C. Habel (Eds.), *Multidisciplinary Approaches to Language Production*, pp. 53–85. Berlin: Mouton de Gruyter.
- Egg, M. and K. Striegnitz (2003). Type coercion from a natural language generation point of view. In H. Härtel and H. Tappe (Eds.), *Mediating between Concepts and Grammar*, Volume 152 of *Trends in Linguistics*, pp. 323–348. Berlin: Mouton de Gruyter.

**Articles in
Conference and
Workshop
Proceedings**

- Cass, A. G., K. Striegnitz, and N. Webb (2018). A Farewell to Arms: Non-verbal Communication for Non-humanoid Robots. In *Proceedings of the Workshop on NLG for Human–Robot Interaction*.
- Cass, A. G., K. Striegnitz, N. Webb, and V. Yu ('17) (2018). Exposing real-world challenges using HRI in the wild. In *Proceedings of the 4th Workshop on Public Space Human-Robot Interaction (PubRob)*, Barcelona, Spain.
- Cass, A., E. Rose ('16), K. Striegnitz, and N. Webb (2015). Determining appropriate first contact distance: trade-offs in human-robot interaction experiment design. In *Proceedings of the Workshop on Designing and Evaluating Social Robots for Public Settings at the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2015)*, Hamburg, Germany.
- Danise ('14), A. and K. Striegnitz (2012, October). A Collaborative Puzzle Game to Study Situated Dialog. In *Proceedings of the Workshop on Human Computation in Digital Entertainment at the Eighth Conference on Artificial Intelligence and Interactive Digital Entertainment*.
- Striegnitz, K., H. Buschmeier, and S. Kopp (2012, May). Referring in Installments: A Corpus Study of Spoken Object References in an Interactive Virtual Environment. In *Proceedings of the 7th International Natural Language Generation Conference (INLG)*.
- Gargett, A., K. Garoufi, A. Koller, and K. Striegnitz (2010). The GIVE-2 Corpus of Instructions in Virtual Environments. In *Proceedings of the 7th International Conference on Language Resources and Evaluation (LREC)*.
- Koller, A., K. Striegnitz, D. Byron, J. Cassell, R. Dale, S. Dalzel-Job, J. Moore, and J. Oberlander (2009). Validating the web-based evaluation of NLG systems. In *Proceedings of the ACL-IJCNLP 2009 Conference Short Papers*, Singapore, pp. 301–304. Association for Computational Linguistics.
- Koller, A., D. Byron, J. Cassell, R. Dale, J. Moore, J. Oberlander, and K. Striegnitz (2009). The Software Architecture for the First Challenge on Generating Instructions in Virtual Environments. In *Proceedings of the Demonstrations Session at EACL 2009*, Athens, Greece, pp. 33–36. Association for Computational Linguistics.
- Arecas, C., A. Koller, and K. Striegnitz (2008). Referring Expressions as Formulas of Description Logic. In *Proceedings of INLG 08 (the 5th International Natural Language Generation Conference)*.
- Striegnitz, K. and V. Barr (2008). Can Computers Think? - an introduction to computer science, programming and artificial intelligence. In *Proceedings of the AAAI Spring Symposium on Using Artificial Intelligence to Motivate Greater Participation in Computer Science*, pp. 104–105.

- Byron, D., A. Koller, J. Oberlander, L. Stoia, and K. Striegnitz (2007). Generating Instructions in Virtual Environments (GIVE): A Challenge and an Evaluation Testbed for NLG. In *Proceedings of the Workshop on Shared Tasks and Comparative Evaluation in Natural Language Generation*, Arlington, VA.
- Striegnitz, K., P. Tepper, A. Lovett, and J. Cassell (2005). Knowledge Representation for Generating Locating Gestures in Route Directions. In *Proceedings of the Workshop on Spatial Language and Dialogue*.
- Striegnitz, K. (2004). Two Kinds of Alternative Sets and a Marking Principle — When to Say "also". In *Proceedings of the Third International Conference on Natural Language Generation (INLG04)*. Presented in the Student Session of INLG04.
- Gabsdil, M., A. Koller, and K. Striegnitz (2002). Natural Language and Inference in a Computer Game. In *Proceedings of Coling 2002*, pp. 294–300.
- Koller, A. and K. Striegnitz (2002). Generation as Dependency Parsing. In *Proceedings of the 40th Annual Meeting of the Association for Computational Linguistics*, pp. 17–24.
- Gardent, C. and K. Striegnitz (2001). Generating Indirect Anaphora. In *Proceedings of the 4th International Workshop on Computational Semantics (IWCS-4)*, pp. 138–155.
- Striegnitz, K. (2001). Model Checking for Contextual Reasoning in NLG. In P. Blackburn and M. Kohlhase (Eds.), *Proceedings of the 3rd Workshop on Inference in Computational Semantics (ICoS-3)*, pp. 101–115.
- Gabsdil, M., A. Koller, and K. Striegnitz (2001). Building a Text Adventure on Description Logic. In *Proceedings of the KI-2001 Workshop on Applications of Description Logics*, Vienna.
- Gabsdil, M., A. Koller, and K. Striegnitz (2001). Playing With Description Logic – Application Description. In *Proceedings of Methods for Modalities*, ILLC, Amsterdam.
- Gabsdil, M. and K. Striegnitz (1999). Classifying Scope Ambiguities. In C. Monz and M. de Rijke (Eds.), *Proceedings of the 1st Workshop in Inference in Computational Semantics (ICoS-1)*, pp. 125–131.
- Koller, A., J. Niehren, and K. Striegnitz (1999). Relaxing Underspecified Semantic Representations for Reinterpretation. In *Proceedings of the 6th Workshop on the Mathematics of Language (MOL-6)*, pp. 73–87.

**Edited
Proceedings**

- Gardent, C. and K. Striegnitz (Eds.) (2011, September). *Proceedings of the 13th European Workshop on Natural Language Generation*. Nancy, France: Association for Computational Linguistics.
- Belz, A., R. Evans, A. Gatt, and K. Striegnitz (Eds.) (2011, July). *Proceedings of the UCNLG+Eval: Language Generation and Evaluation Workshop*. Edinburgh, Scotland: Association for Computational Linguistics.
- Striegnitz, K. (Ed.) (2001). *Proceedings of the ESSLLI Student Session*. Available at <http://www.coli.uni-saarland.de/~kris/esslli01/proc.ps.gz>.

**Panel reviewed
published
Abstracts**

- Anderson-Hanley, C., N. Barcelos, M. Maloney ('15), M. Michel ('16), K. Striegnitz, and T. Saulnier (2016). Neuropsychological Effects of an Interactive Physical and Cognitive Exercise System (iPACES) for Older Adults: Pilot Comparison of In-Home Neuro-Exergame Versus Neuro-Game (Abstract). In *Proceedings of the Annual Meeting of the International Neuropsychological Society*, Volume 22, Supplement 1 of *Journal of the International Neuropsychological Society*.

**Non-peer
reviewed
Articles**

- Striegnitz, K., A. Denis, A. Gargett, K. Garoufi, A. Koller, and M. Theune (2011). Report on the Second Second NLG Challenge on Generating Instructions in Virtual Environments (GIVE-2.5). In *Proceedings of the Generation Challenges Session at the 13th European Workshop on Natural Language Generation Conference (INLG)*, Nancy, France.
- Koller, A., K. Striegnitz, A. Gargett, D. Byron, J. Cassell, R. Dale, J. Moore, and J. Oberlander (2010). Report on the Second NLG Challenge on Generating Instructions in Virtual Environments (GIVE-2). In *Proceedings of the 6th International Natural Language Generation Conference (INLG)*, Trim, Ireland.
- Byron, D., A. Koller, K. Striegnitz, J. Cassell, R. Dale, J. Moore, and J. Oberlander (2009). Report on the First NLG Challenge on Generating Instructions in Virtual Environments (GIVE). In *Proceedings of the 12th European Workshop on Natural Language Generation (ENLG)*, Athens, Greece.
- Striegnitz, K. and F. Majda (2009). Landmarks in Navigation Instructions for a Virtual Environment. In *Proceedings of the Workshop on the First NLG Challenge on Generating Instructions in Virtual Environments*. Available online at <http://www.give-challenge.org/research/page.php?id=give-1-results>.
- Koller, A., J. Moore, B. di Eugenio, J. Lester, L. Stoia, D. Byron, J. Oberlander, and K. Striegnitz (2007). Instruction Giving in Virtual Worlds. In R. Dale and M. White (Eds.), *Shared Tasks and Comparative Evaluation in Natural Language Generation – Workshop Report*. Available online at <http://www.ling.ohio-state.edu/nlgeval07/report.html>.

Data

- GIVE Challenge (2009-12). Corpora of system-human interactions collected in the first three editions of the GIVE Challenge. <http://www.give-challenge.org/research>.
- Gargett, A., K. Garoufi, A. Koller, and K. Striegnitz (2010a). A corpus of human-human interactions in GIVE-2 style environments. <http://www.give-challenge.org/research>.