

# ADAM WIEMERSLAGE

ajwieme@gmail.com | Adamits.github.io

## EDUCATION

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### University of Colorado Boulder

PhD, Computer Science

*01/2021 - ongoing*

MS, Computational Linguistics

*08/2016 - 05/2018*

### Illinois State University

BA, English – Linguistics, Spanish Minor

*08/2009 - 05/2013*

Honors Program Scholar; Study abroad: University of Hong Kong

## PROFESSIONAL EXPERIENCE

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### Teaching/Research Assistant, University of Colorado Boulder. Boulder, CO

- Graduate Research Assistant *Summer 2021, Summer 2023*
- Algorithms (TA) *Spring 2021*
- Data Science and Machine Learning (TA) *Summer 2021*
- Software Development Methods and Tools (TA) *Fall 2021*
- Algorithms (TA) *Spring 2022*
- Graduate Natural Language Processing (TA) *Fall 2022*
- Introduction to Artificial Intelligence (TA) *Spring 2023*

### AI Labs Intern, Educational Testing Service (ETS). Princeton, NJ

*06/2022- 05/2023*

- Research in argument mining and argument generation on the content generation team
- Combined language models and information retrieval to generate arguments backed by evidence from the news.

### Research Scientist, Pearson. Boulder, CO

*10/2019- 01/2021*

- Research and development of automatic essay feedback for higher education.
- Development of new evaluation metrics for machine learning models.
- Research and development of NLP-powered ESL learning tools.

### Senior Computational Linguist, US Army Research Laboratory. Adelphi, MD

*11/2018- 10/2019*

- Research and development for machine translation, computational morphology, and automatic speech recognition.
- Software engineering in C++ and Python.

### Senior Engineer, Avhana Health. Baltimore, MD

*09/2018- 11/2018*

- Back-end development in Ruby on Rails and Java.

### Software Engineer, Freelance. Chicago, IL

*06/2015- 01/2017*

- Web application development for small businesses.

### Staff Consultant, Oracle USA (BigMachine acquisition). Chicago, IL

*06/2013- 01/2015*

- Design, implement, and test sales automation technology.

## SOFTWARE

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### Yoyodyne

- Python library for training neural character transduction models conditioned on features.
- Built with pytorch and pytorch-lightning.

## AWARDS

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**Outstanding Research Award** – \$500, University of Colorado Boulder

*AY 2022/2023*

## SERVICE

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I have served on the program committee as a reviewer for multiple workshops and conferences

- AmericasNLP 2021, 2022, 2023
- ACL Rolling Review 2021, 2022, 2023
- ACL 2022
- SIGMORPHON 2022, 2023
- AACL 2023

## PUBLICATIONS

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**Adam Wiemerslage**, Changbing Yang, Garrett Nicolai, Miikka Silfverberg, and Katharina Kann. **An Investigation of Noise in Morphological Inflection**. In *Findings of the Association for Computational Linguistics: ACL 2023*, pages 3351–3365, Toronto, Canada, July 2023. Association for Computational Linguistics

**Adam Wiemerslage**, Shiran Dudy, and Katharina Kann. **A Comprehensive Comparison of Neural Networks as Cognitive Models of Inflection**. In *Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing*, pages 1933–1945, Abu Dhabi, United Arab Emirates, December 2022. Association for Computational Linguistics

Abteen Ebrahimi, Manuel Mager, **Adam Wiemerslage**, Pavel Denisov, Arturo Oncevay, Danni Liu, Sai Koneru, Enes Yavuz Ugan, Zhaolin Li, Jan Niehues, Monica Romero, Ivan G Torre, Tanel Alumäe, Jiaming Kong, Sergey Polezhaev, Yury Belousov, Wei-Rui Chen, Peter Sullivan, Ife Adenigba, Bashar Talafha, Alcides Alcoba Inciarte, Muhammad Abdul-Mageed, Luis Chiruzzo, Rolando Coto-Solano, Hilaria Cruz, Sofía Flores-Solórzano, Aldo Andrés Álvarez López, Ivan Meza-Ruiz, John E. Ortega, Alexis Palmer, Rodolfo Joel Zevallos Salazar, Kristine Stenzel, Thang Vu, and Katharina Kann. **Findings of the Second AmericasNLP Competition on Speech-to-Text Translation**. In Marco Ciccone, Gustavo Stolovitzky, and Jacob Albrecht, editors, *Proceedings of the NeurIPS 2022 Competitions Track*, volume 220 of *Proceedings of Machine Learning Research*, pages 217–232. PMLR, 28 Nov–09 Dec 2022

**Adam Wiemerslage**, Miikka Silfverberg, Changbing Yang, Arya McCarthy, Garrett Nicolai, Eliana Colunga, and Katharina Kann. **Morphological Processing of Low-Resource Languages: Where We Are and What’s Next**. In *Findings of the Association for Computational Linguistics: ACL 2022*, pages 988–1007, Dublin, Ireland, May 2022. Association for Computational Linguistics

**Adam Wiemerslage**, Arya D. McCarthy, Alexander Erdmann, Garrett Nicolai, Manex Agirrezabal, Miikka Silfverberg, Mans Hulden, and Katharina Kann. **Findings of the SIGMORPHON 2021 Shared Task on Unsupervised Morphological Paradigm Clustering**. In *Proceedings*

of the 18th SIGMORPHON Workshop on Computational Research in Phonetics, Phonology, and Morphology, pages 72–81, Online, August 2021. Association for Computational Linguistics

Andrew Gerlach, **Adam Wiemerslage**, and Katharina Kann. **Paradigm Clustering with Weighted Edit Distance**. In *Proceedings of the 18th SIGMORPHON Workshop on Computational Research in Phonetics, Phonology, and Morphology*, pages 107–114, Online, August 2021. Association for Computational Linguistics

Scott Hellman, William Murray, **Adam Wiemerslage**, Mark Rosenstein, Peter Foltz, Lee Becker, and Marcia Derr. **Multiple Instance Learning for Content Feedback Localization without Annotation**. In *Proceedings of the Fifteenth Workshop on Innovative Use of NLP for Building Educational Applications*, pages 30–40, Seattle, WA, USA → Online, July 2020. Association for Computational Linguistics

**Adam Wiemerslage**, Miikka Silfverberg, and Mans Hulden. **Phonological Features for Morphological Inflection**. In *Proceedings of the Fifteenth Workshop on Computational Research in Phonetics, Phonology, and Morphology*, pages 161–166, Brussels, Belgium, October 2018. Association for Computational Linguistics

Ling Liu, Ilamvazhuthy Subbiah, **Adam Wiemerslage**, Jonathan Lilley, and Sarah Moeller. **Morphological Reinflection in Context: CU Boulder’s Submission to CoNLL–SIGMORPHON 2018 Shared Task**. In *Proceedings of the CoNLL–SIGMORPHON 2018 Shared Task: Universal Morphological Reinflection*, pages 86–92, Brussels, October 2018. Association for Computational Linguistics

Miikka Silfverberg, **Adam Wiemerslage**, Ling Liu, and Lingshuang Jack Mao. **Data Augmentation for Morphological Reinflection**. In *Proceedings of the CoNLL SIGMORPHON 2017 Shared Task: Universal Morphological Reinflection*, pages 90–99, Vancouver, August 2017. Association for Computational Linguistics

## SKILLS

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**Programming Languages and Frameworks** Python, C++, Ruby, HTML/CSS/JavaScript, Pytorch, Dynet, Numpy, HuggingFace, Kaldi, Scikit-learn, Scipy, Pandas, Django, Ruby on Rails, Docker