Adam Wiemerslage

https://adamits.github.io // ajwieme@gmail.com

EDUCATION

University of Colorado Boulder, Boulder, CO
PhD Student, Computer Science | January 2021 - ongoing
Master of Science, Computational Linguistics | *May 2018*

Illinois State University, Bloomington, IL
Bachelor of Arts, English – Linguistics, Spanish Minor | *May 2013*
Honors Program Scholar, study abroad: University of Hong Kong

PUBLICATIONS

Adam Wiemerslage, Kyle Gorman, and Katharina Kann. *Quantifying the Hyperparameter Sensitivity of Neural Networks.* Under Review.

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, July 2023. Association for Computational Linguistics

Adam Wiemerslage, Shiran Dudy, and Katharina Kann. *A Comprehensive Comparison of Neural Networks as Cognitive Models of Inflection.* Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing.

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, 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, Online, August 2021. Association for Computational Linguistics

Andrew Gerlach, **Adam Wiemerslage**, and Katharina Kann. 2021. *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 R Murray, **Adam Wiemerslage**, Mark Rosenstein, Peter Foltz, Lee Becker, Marcia Derr. 2020. In Proceedings of the Fifteenth Workshop on Innovative Use of NLP for Building Educational Applications, pages 30-40 Seattle, WA, USA at online, July 10, 2020. Association for Computational Linguistics

Adam Wiemerslage, Miikka Silfverberg, and Mans Hulden. 2018. *Phonological Features for Morphological Inflection*. In Proceedings of the 15th SIGMORPHON Workshop on Computational Research in Phonetics, Phonology, and Morphology, pages 161–166 Brussels, Belgium, October 31, 2018. The Special Interest Group on Computational Morphology and Phonology

Ling Liu, Ilamvazhuthy Subbiah, **Adam Wiemerslage**, Jonathan Lilley, and Sarah R. 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,

Belgium, October 31, 2018. Association for Computational Linguistics

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

SERVICE
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
- AAAI 2023

WORK EXPERIENCE

University of Colorado Boulder
Graduate Research Assistant | September 2016 - September 2018
Graduate Research Assistant | Summer 2021, Summer 2023
Teaching Assistant
- *Algorithms* | Spring 2021
- *Data Science and Machine Learning* | Summer 2021
- *Software Development Methods and Tools* | Fall 2021
- *Algorithms* | Spring 2022
- *Natural Language Processing* | Fall 2022
- *Introduction to Artificial Intelligence* | Spring 2023

Educational Testing Service (ETS) Princeton, NJ
AI Labs Intern | June 2022 - Ongoing
- Research in argument mining and argument generation on the content generation team
- Built a system combining pretrained language models and information retrieval techniques to generate arguments backed by evidence from the news.

Pearson Boulder, CO
Research Scientist | October 2019 - January 2021
- Research and development of automatic essay feedback for higher education
- Development of new evaluation metrics
- Research and development of NLP-powered ESL learning tools

United States Army Research Laboratory Adelphi, MD
Senior Computational Linguist (contractor) | November 2018 - October 2019
- Research and development for machine translation, computational morphology, and automatic speech recognition
- Software engineering in C++ and Python

Avhana Health Baltimore, MD
Senior Engineer | *September 2018 – November 2018*
- Back-end development in Ruby on Rails and Java.

Freelance
Software Engineer | *June 2015 – January 2017*
- Web application development for small businesses

Oracle USA (BigMachine acquisition) Chicago, IL
Staff Consultant | *June 2013– June 2015*
- Design, implement, and test sales automation technology

SOFTWARE
Yoyodyne: https://github.com/CUNY-CL/yoyodyne/tree/master
- Wrote the initial version of the library
- Implemented several neural character transduction architectures
- Designed much of the existing interface for implementing models

SKILLS
Programming and Markup Languages
Python, C++, Ruby, HTML/CSS/JavaScript

Other Technologies
Pytorch, Dynet, Numpy, HuggingFace, Kaldi, Scikit-learn, Scipy, Pandas, spaCy, Django, Ruby on Rails, Docker, PostgreSQL