

ADAM WIEMERSLAGE

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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

WORK EXPERIENCE

Pearson Knowledge Technologies Boulder, CO

Research Scientist - NLP and Machine Learning | October 2019 - January 2021

- Research and development of automatic essay feedback for higher education
- Formalization of automatic feedback tasks, and development of 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 of a neural morphological analyzer to aid Information Retrieval in morphologically rich languages using Dynet.
- Development of Speech and Translation models for an Android application
- Development of machine translation training data from noisy sources
- C++ integration of Kaldi toolkit with application for Human Robot Dialogue Interaction

Avhana Health Baltimore, MD

Senior Engineer | September 2018 – November 2018

- Back-end development in Ruby on Rails and Java.
- integration of asynchronous features with Electronic Medical Records

CLEAR Lab CU Boulder

Research Assistant | January, 2017 - September 2018

- Software and API development for multiple projects including: VerbNet, ClearNLP, ClearEarth, and THYME.
- Development and implementation of Inter-Annotator Agreement metrics.
- Developing a Docker for researchers to access NLP tools, and query text data

The Arapaho Project CU Boulder

Research Assistant | September, 2016 - May 2018

- Maintaining technical portion of the database of Arapaho language data
- Building MongoDB backend for fast querying, filtering, and concordance.

Superjova

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

Private, Hong Kong

English Tutor | *Fall 2012*

SKILLS

Natural Languages

English (Native), Spanish (working)

Programming and Markup Languages

Python, C++, Ruby, Java, OCaml, SQL, HTML/CSS/JavaScript, XML/XSL

Other Technologies

Pytorch, Dynet, Numpy, Kaldi, Scikit-learn, Scipy, Pandas, spaCy, Django, Ruby on Rails, Docker, MongoDB, PostgreSQL, ElasticSearch

PUBLICATIONS

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