

Zoey (Ying) Liu

CONTACT INFORMATION	Department of Linguistics 4131 Turlington Hall University of Florida Gainesville, FL 32611-5454	<i>Email:</i> liu.ying@ufl.edu <i>Website:</i> https://zoeyliu18.github.io <i>Lab:</i> https://ufcompling.github.io
ACADEMIC EMPLOYMENT	Tenure-Track Assistant Professor (Courtesy Assistant Professor, June - Dec 2022) <i>Department of Linguistics, University of Florida, Gainesville, FL USA</i>	Jan 2023 -
	Postdoctoral Research Fellow Advisor: Emily Prud'hommeaux <i>Department of Computer Science, Boston College, Chestnut Hill, MA USA</i>	2020 - 2022
EXPERIENCE	Software Development Research Intern <i>Cognitive Computing Lab, Baidu, PRC</i>	Summer 2019
EDUCATION	Ph.D., Linguistics Advisor: Kenji Sagae <i>University of California, Davis, CA USA</i>	2016 - 2020
	M.A., Linguistics Advisor: Raúl Aranovich <i>University of California, Davis, CA USA</i>	2014 - 2016
	B.A. (with honors), Translation <i>Nankai University, Tianjin PRC</i>	2010 - 2014
AWARDS	Computing Innovation Fellowship <i>National Science Foundation / Computing Research Association / Computing Community Consortium</i> Total funding: \$265,515	2021 - 2023
	Graduate Travel Award <i>University of California, Davis, CA USA</i>	2018
	Combined Summer Awards <i>University of California, Davis, CA USA</i>	2015
	Secondary Scholarship <i>Nankai University, Tianjin PRC</i>	2011 - 2013
INTERNAL GRANTS	New Language Training and Machine Learning as Tools to Measure and Promote Neurocognitive Resilience in Healthy Aging. University of Florida Cognitive Aging and Memory Pilot Grant Program. Role: Co-PI	

For all publications and presentations, * indicates students, advisees, or mentees; {} indicates equal contribution; CogSci proceedings are refereed but non-archival.

- JOURNAL ARTICLES 2023. **Zoey Liu** and Emily Prud’hommeaux. [Data-driven Parsing Evaluations for Child-Parent Interactions](#). *Transactions of the Association for Computational Linguistics (TACL)* 2023; 11 1734–1753.
2022. **Zoey Liu**. [A Multifactorial Approach to Crosslinguistic Constituent Orderings](#). In *Linguistics Vanguard*.
2022. **Zoey Liu** and Emily Prud’hommeaux. [Data-driven Model Generalizability in Crosslinguistic Low-resource Morphological Segmentation](#). *Transactions of the Association for Computational Linguistics (TACL)* 10:393-413.
2022. Natalia Levshina, Savithry Namboodiripad **Zoey Liu** Anastasia Panova and Natalia Stoyanova. [Why we need a gradient approach to word order](#). In *Linguistics: An Interdisciplinary Journal of the Language Sciences*.
2020. **Zoey Liu**. [Mixed Evidence for Crosslinguistic Dependency Length Minimization](#). *STUF-Language Typology and Universals* 73(4), 605-633.
2018. Santiago Barreda and **Zoey Liu**. [Apparent-Talker Height is Influenced by Mandarin Lexical Tone](#). *The Journal of the Acoustical Society of America, EL* 143(2), EL61-EL66.
- PEER-REVIEWED
PROCEEDING
PAPERS 2024. **Zoey Liu** and Bonnie J. Dorr. The Effect of Data Partitioning Strategy on Model Generalizability: A Case Study of Morphological Segmentation. To appear in *Proceedings of the 2024 Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL)*.
2024. Rob van der Goot, **Zoey Liu** and Max Müller-Eberstein*. Enough is Enough! A Case Study on the Effect of Data Size for Evaluation Using Universal Dependencies. To appear in *Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING 2024)*.
2024. Nitin Venkateswaran* and **Zoey Liu**. Looking within the self: Investigating the Impact of Data Augmentation with Self-training on Automatic Speech Recognition for Hupa. In *Proceedings of the 7th Workshop on the Use of Computational Methods in the Study of Endangered Languages (ComputEL-7)*, 58-66.
2023. Jordan Kodner, {Sarah Payne*, Salam Khalifa*} and **Zoey Liu**. Morphological Inflection: A Reality Check. In *Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics (ACL)*, 6082–6101.
2023. Robbie Jimerson*, **Zoey Liu** and Emily Prud’hommeaux. An (unhelpful) guide to selecting the best ASR architecture for your under-resourced language. In *Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics (ACL)*, 1008–1016.
2023. **Zoey Liu**, Lauren Lamdar*, Stefanie Wulff and Kenji Sagae. Double PP Constituent Ordering Preferences in English Early Child Language. In *Proceedings of the 45th Annual Conference of the Cognitive Science Society (CogSci)*, 317-324.
2023. Jordan Kodner, {Salam Khalifa*, Sarah Payne*} and **Zoey Liu**. Re-Evaluating the Evaluation of Neural Morphological Inflection Models. In *Proceedings of the 45th Annual Conference of*

the Cognitive Science Society (CogSci), 3259-3267.

2023. **Zoey Liu**, Justin Spence and Emily Prud’hommeaux. Investigating data partitioning strategies for crosslinguistic low-resource ASR evaluation. In *Proceedings of the 17th Conference of the European Chapter of the Association for Computational Linguistics (EACL)*, 123-131.

2023. **Zoey Liu**, Justin Spence and Emily Prud’hommeaux. Studying the impact of language model size for low-resource ASR. In *Proceedings of the 6th Workshop on the Use of Computational Methods in the Study of Endangered Languages (ComputEL-6)*, 77-83.

2023. **Zoey Liu** and Stefanie Wulff. The development of dependency length minimization in early child language: A case study of the dative alternation. In *Proceedings of the 2023 International Conference on Dependency Linguistics (Depling)*, 1-8.

2022. Duanchen Liu*, **Zoey Liu**, Qingyun Yang*, Yujing Huang and Emily Prud’hommeaux. Evaluating the Performance of Transformer-based Language Models for Neuroatypical Language. In *Proceedings of the 29th International Conference on Computational Linguistics (COLING)*, 3412-3419.

2022. {**Zoey Liu**, Crystal Richardson*}, Richard Hatcher and Emily Prud’hommeaux. *Not always about you*: Prioritizing community needs when developing endangered language technology. In *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (ACL)*, 3933-3944.

2022. **Zoey Liu**, Justin Spence and Emily Prud’hommeaux. Enhancing Documentation of Hupa with Automatic Speech Recognition. In *The 5th Workshop on the Use of Computational Methods in the Study of Endangered Languages (ComputEL-5)*, 187-192.

2022. **Zoey Liu**, Tiwa Eisape*, Emily Prud’hommeaux and Joshua Hartshorne. Data-driven Crosslinguistic Syntactic Transfer in Second Language Learning. In *Proceedings of the 44th Annual Conference of the Cognitive Science Society (CogSci)*, 1903-1911.

2022. **Zoey Liu**, Ria Upreti*, Mathew A. Kramer* and Savithry Namboodiripad. Does One Size Fit all in Crosslinguistic Dependency Length Minimization? In *Proceedings of the 44th Annual Conference of the Cognitive Science Society (CogSci)*, 2066-2073.

2022. Khuyagbaatar Batsuren, Omer Goldman **Zoey Liu** Reut Tsarfaty and Ekaterina Vylomova. UniMorph 4.0: Universal Morphology. In *The 13th Language Resources and Evaluation Conference (LREC)*, 840-855.

2021. **Zoey Liu**. [The Crosslinguistic Relationship between Ordering Flexibility and Dependency Length Minimization: A Data-Driven Approach](#). In *Proceedings of The Society for Computation in Linguistics (SCiL)*, 264-274.

2021. **Zoey Liu**, Robbie Jimerson* and Emily Prud’hommeaux. [Morphological Segmentation for Seneca](#). In *Proceedings of The First Workshop on NLP for Indigenous Languages of the Americas (AmericasNLP)*, 90-101.

2021. **Zoey Liu** and Emily Prud’hommeaux. [Dependency Parsing Evaluation for Low-Resource Spontaneous Speech](#). In *Proceedings of The Second Workshop on Domain Adaptation for NLP (Adapt-NLP)*, 156-165.

2021. **Zoey Liu** and Masoud Jasbi. [English Negative Constructions and Communicative Functions in Child Language](#). In *Proceedings of The 43rd Annual Conference of the Cognitive Science Society*

(*CogSci*), 2957-2963.

2021. William Dyer, Richard Futrell, **Zoey Liu** and Gregory Scontras. [Predicting cross-linguistic adjective order with information gain](#). In *Findings of the Joint Conference of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing (Findings of ACL)*, 957-967.

2021. Christine Yang*, Duanchen Liu*, Qingyun Yang*, **Zoey Liu** and Emily Prud'hommeaux. [Predicting pragmatic discourse features in the language of adults with autism spectrum disorders](#). In *Proceedings of the Student Research Workshop at The Joint Conference of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing (ACL-IJCNLP SRW)*, 284-291.

2021. Tiago Pimentel, Maria Ryskina, **Zoey Liu**, Ben Ambridge and Ekaterina Vylomova. [SIGMORPHON 2021 Shared Task on Morphological Reinflection: Generalization Across Languages](#). In *Proceedings of the 18th SIGMORPHON Workshop on Computational Research in Phonetics, Phonology, and Morphology (SIGMORPHON)*, 229-259.

2020. **Zoey Liu** and Emily Morgan. [Frequency-dependent Regularization in Constituent Ordering Preferences](#). In *Proceedings of the 42nd Annual Conference of the Cognitive Science Society (CogSci)*, 2990-2996.

2020. Mingming Sun, Wenyue Hua, **Zoey Liu**, Xin Wang, Kangjie Zheng and Ping Li. [A Predicate-Function-Argument Annotation of Natural Language for Open-Domain Information eXpression](#). In *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2140-2150.

2019. **Zoey Liu**. [A Comparative Corpus Analysis of PP Ordering in English and Chinese](#). In *Proceedings of the First Workshop on Quantitative Syntax (Quasy, SyntaxFest)*, 33-45.

2018. Justin Spence, **Zoey Liu**, Kayla Palakurthy and Tyler Lee-Wynant. [Syntactic Annotation of a Hupa Text Corpus](#). In *Proceedings of Working Papers in Athabaskan Languages: Alaska Native Language Center Working Papers*.

PEER-REVIEWED
PROCEEDING
ABSTRACTS

2021. **Zoey Liu** and Emily Morgan. [Frequency-dependent Regularization in Syntactic Constructions](#). In *Proceedings of The Society for Computation in Linguistics (SCiL)*, 387-389.

2021. Alex Kramer* and **Zoey Liu**. [A Data-driven Approach to Crosslinguistic Structural Biases](#). In *Proceedings of The Society for Computation in Linguistics (SCiL)*, 344-346.

2019. **Zoey Liu**. [Quantifying Structural and Lexical Constraints in PP Ordering Typology](#). In *Proceedings of The Society for Computation in Linguistics (SCiL)*, 306-309.

2018. **Zoey Liu** and Kenji Sagae. [Dependency Length Minimization and Lexical Frequency in Prepositional Phrase Ordering in English](#). In *Proceedings of The Society for Computation in Linguistics (SCiL)*, 189-192.

SELECTED TALKS &
PRESENTATIONS

2024. **Zoey Liu**. Data-driven Approach to Cross-linguistic Variation in Languages, Machines ... and Data. Invited Keynote at The 23rd Meeting of the Texas Linguistics Society (TLS).

2023. **Zoey Liu**, Emily Prud'hommeaux and Joshua Hartshorne. Uncovering cross-linguistic morphosyntactic transfer in second language learning. Oral presentation at Boston University Conference on Language Development (BUCLD).

2023. **Zoey Liu**, Emily Prud’hommeaux and Joshua Hartshorne. Uncovering cross-linguistic morphosyntactic transfer in second language learning. Oral presentation at Many Paths to Language (MPaL).
2023. **Zoey Liu**, Ria Upreti*, Mathew A. Kramer* and Savithry Namboodiripad. Does One Size Fit all in Crosslinguistic Dependency Length Minimization? Oral presentation at *The 16th International Cognitive Linguistics Conference*.
2022. **Zoey Liu**, Tiwa Eisape*, Emily Prud’hommeaux and Joshua Hartshorne. Data-driven Crosslinguistic Syntactic Transfer in Second Language Learning. Poster presentation at *Architectures and Mechanisms of Language Processing (AMLaP)*.
2022. **Zoey Liu**. Data-driven Evaluation for Crosslinguistic Low-resource NLP. Poster presentation at *The Networking and Information Technology Research and Development 30th Anniversary & CIFellows Symposium*.
2022. Gwendolyn Rehrig, Madison Barker*, Beverly Cotter*, **Zoey Liu**, Harvey Qiu* and Fernanda Ferreira. Trade-offs between memory retrieval and planning in language production. Poster presentation at *The 35th Annual Conference on Human Sentence Processing (HSP)*.
2022. **Zoey Liu**, Emily Prud’hommeaux and Justin Spence. Automated Morphological Analysis of Hupa. Oral presentation at *The Society for the Study of the Indigenous Languages of the Americas (SSILA)*.
2022. **Zoey Liu**, Ria Upreti*, Mathew A. Kramer* and Savithry Namboodiripad. Dependency length minimization does not affect acceptability of PP ordering in Hindi and English. Oral presentation at *The 96th Annual Meeting of the Linguistic Society of America (LSA)*.
2021. **Zoey Liu**. [A multifactorial approach to constituent orderings](#). Oral presentation at *The 34th Annual CUNY Human Sentence Processing Conference*.
2021. **Zoey Liu** and Emily Morgan. Frequency-dependent Regularization in Syntactic Constructions. Poster presentation at *The Society for Computation in Linguistics (SCiL)*.
2021. Alex Kramer* and **Zoey Liu**. A Data-driven Approach to Crosslinguistic Structural Biases. Poster presentation at *The Society for Computation in Linguistics (SCiL)*.
2021. **Zoey Liu**. Data-driven Approach to Gradience in Languages and Machines. Invited. Language and Cognition, Harvard University, November 9th.
2021. **Zoey Liu**. A Data-driven Approach to Structural Variation. Invited. Department of Linguistics, University of California, Davis, January 11th.
2020. **Zoey Liu**. Data-driven Crosslinguistic Modeling of Constituent Ordering Preferences. Invited. TedLab, Department of Brain and Cognitive Sciences, MIT, October 6th.
2020. **Zoey Liu**. Frequency-dependent Regularization in Constituent Ordering Preferences. Invited. NERT, Department of Linguistics, Georgetown University, March 31st.
2020. **Zoey Liu**. The Relationship between Word Order Flexibility and Dependency Length Minimization. Oral presentation at *53rd Annual Meeting of the Societas Linguistica Europaea (SLE)*.
2020. **Zoey Liu** and Emily Morgan. Item-specific Regularization in Word Order Preferences. Poster presentation at *The 11th International Conference on Construction Grammar* (postponed due to

COVID-19).

2020. **Zoey Liu** and Emily Morgan. [Frequency-dependent Regularization in Abstract Syntactic Structures](#). Oral presentation at *The 33rd Annual CUNY Human Sentence Processing Conference*.

2020. **Zoey Liu**. Crosslinguistic Extent of Dependency Length Minimization. Poster presentation at *The 33rd Annual CUNY Human Sentence Processing Conference*.

2020. **Zoey Liu**. Do Arguments Appear Closer Crosslinguistically? Poster presentation at *The 33rd Annual CUNY Human Sentence Processing Conference*.

2019. **Zoey Liu**. Quantifying Structural and Lexical Constraints in PP Ordering Typology. Poster presentation at *The Society for Computation in Linguistics (SCiL)*.

2019. Santiago Barreda and **Zoey Liu**. The Effect of Linguistic Experience on the Perception of Talker Height from Speech. Poster presentation at *The 93rd Annual Meeting of the Linguistic Society of America (LSA)*.

2018. **Zoey Liu**. Quantifying Structural and Lexical Constraints in PP Ordering Typology. Oral presentation at *California Meeting on Psycholinguistics*.

2018. **Zoey Liu** and Kenji Sagae. Dependency Length Minimization and Lexical Frequency in Prepositional Phrase Ordering in English. Oral presentation at *The Society for Computation in Linguistics (SCiL)*.

2017. Justin Spence, **Zoey Liu**, Kayla Palakurthy, & Tyler Lee-Wynant. Syntactic Annotation of a Hupa Text Corpus. Oral presentation at *Dene/Athabaskan Language Conference*.

2017, **Zoey Liu**, Tyler Lee-Wynant and Justin Spence. Building for the Future: Developing a Hupa Dependency Treebank. Oral presented at *UC Davis Symposium on Language Research*.

2017. Justin Spence, **Zoey Liu**. Building for the Future: Adopting TEI Standards in a Text of Hupa. Oral presentation at *The Society of the Study of the Indigenous Languages of the Americas (SSILA)*.

2016. **Zoey Liu**. The Story of Collocation & Dispersion. Oral presentation at *UC Davis Symposium on Language Research*.

2016. Carole E. Chaski, Elizabeth A. Smith, Cristina Aggazzotti, & **Zoey Liu**. Confirmation Bias and Metalinguistic Awareness. Oral presentation at *American Academy of Forensic Sciences*.

2016. **Zoey Liu**. The Role of Function Words: An Empirical Study of Text Distance Measure Performance. Oral presentation at *The Association for Linguistic Evidence*.

2015. **Zoey Liu**. Rethinking Collocation: Directional Association Measure and its Potential Role in Semantic Similarity Computation. Oral presentation at *California Universities Semantics and Pragmatics Work 8*.

TEACHING

Instructor

University of Florida, Gainesville, FL USA

Programming for Linguists

Introduction to Computational Linguistics

All Computational Models are Wrong

Advanced Statistics

University of California, Davis, CA USA

Introduction to Linguistics

ESL

Teaching Assistant

University of California, Davis, CA USA

Computational Linguistics

Corpus Linguistics & Text Analysis

Linguistic Analysis I

Introduction to Linguistics

ADVISING /
MENTORING

Graduate supervision / committees

Nitin Venkateswaran (Linguistics)

Yihan Chen (Linguistics)

Alexis Davis (Linguistics)

Godfred Agyapong (Linguistics)

Chathuri Jayaweera (Computer Science)

Undergraduate supervision

Kaitlyn McGowan (Linguistics & English)

Mikaela Boelkins (Linguistics & Arabic)

Nathaniel Parkes (Linguistics & Computer Science)

Jarrod Cruz (Linguistics & Anthropology)

Lauren Prieto (Linguistics & Computer Science)

Daniel J. Cox (Computer Science)

SERVICE

Local chair

EMNLP 2024

Area chair

ACL 2023, EACL 2024, NAACL 2024, ACL 2024

Conference reviewing / committees

EMNLP, AmericasNLP, SIGTYP, ACL, CoNLL, SSILA, SCiL, SLPAT, ComputEL, CogSci, Inter-speech, EACL, BAE, NLP for Field Linguistics, LREC, ACL Rolling Review, HSP, CAWL

Ad-hoc Journal reviewing

Linguistics Vanguard, Language Resources and Evaluation, Languages, Bilingualism: Language and Cognition, TACL, Syntax

Other reviewing

National Science Foundation

Leadership Training Development, Advocates for Indigenous California Language Survival

Technical advisor & Planning committee member 2020 -

Breath of Life Archival Institute for Indigenous California Languages, Berkeley, CA USA

Linguistic partner & Technical service June - July, 2020

Linguistic partner (Patwin) June 3-9, 2018

OTHER EDUCATION **LSA Linguistic Summer Institute**

University of California, Davis 2019

University of Chicago 2015