

# Melissa A. Lieffers

## CURRICULUM VITAE

PhD Student, Computer Science  
Luddy School of Informatics, Computing, and  
Engineering  
Indiana University - Bloomington  
  
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## Education

Doctor of Philosophy, Computer Science  
Indiana University, Bloomington, IN - *current*  
  
Master of Arts, Computational Linguistics  
Indiana University, Bloomington, IN - August  
  
Master of Arts, Hispanic Literature  
Indiana University, Bloomington, IN - May 2021  
  
Bachelor of Arts, *summa cum laude*, Applied Linguistics,  
Spanish; Union University, Jackson, TN - May 2018

## Research Interests

Natural language processing for under-resourced languages, Speech processing, Ethics in NLP, Hate speech detection, Language identification and classification, Language acquisition technology

## Languages

English: Native fluency  
Spanish: Near-native fluency  
MSA Arabic: Intermediate fluency  
Persian: Intermediate Fluency  
French: Intermediate Fluency  
Catalan: Advanced Fluency

## Work Experience

Computational Linguist Intern, The Language Conservancy, *June 2024 - present*  
Graduate Assistant: Library and Special Collections, Kinsey Institute, *August 2024-present*  
Data Annotator, Countering ONline NEtworked Conspiracy Theories, *January-August 2024*  
Associate Instructor, Department of Anthropology, *August 2023-May 2024*  
Senior Assistant Director of Marketing, Office of Enrollment Management, Indiana  
University-Bloomington, *June 2022 - July 2023*  
Associate Instructor, Department of Spanish and Portuguese, *August 2019-May 2022*

## Skills

Programming Languages: Python, Lua, R, Slurm for High Performance Computing  
Machine Learning: PyTorch, Hugging Face, TensorFlow, Gensim  
NLP Libraries and Frameworks: NLTK, spaCy, NumPy, Apertium, Kaldi  
Linguistic Annotation Tools: Praat, ELAN, TLEX, FLEX

## Selected Academic Awards, Fellowships, Grants

Pol-IU-Glot Award, Distinguished Pol-IU-Glot Scholar Program • April 2025  
Foreign Language Area Studies (FLAS) Fellowship for Study Abroad, Persian I, Indiana University •  
Academic Year 2025- 2026  
Foreign Language Area Studies (FLAS) Fellowship for Study Abroad, Bosnian/Serbian/Croatian I, Indiana  
University • Summer 2025  
Foreign Language Area Studies (FLAS) Fellowship for Study Abroad, Bosnian/Serbian/Croatian I, Indiana  
University • Summer 2024  
Foreign Language Area Studies (FLAS) Fellowship, Advanced Catalan, Indiana University • Spring 2024  
J.M. Hill Award for Outstanding Graduate Student Paper: “El archivo imperial en *Tela de servoya* de Myriam

Moscona” • Department of Spanish and Portuguese • Spring 2021  
Critical Language Scholarship (CLS), Arabic language study at the Arab American Language Institute in Tangier, Morocco, American Councils for International Education & U.S. Department of State’s Bureau of Educational and Cultural Affairs • Summer 2021  
Foreign Language Area Studies (FLAS) Fellowship for Study Abroad, Arabic Level 4, Indiana University • Summer 2021  
Foreign Language Area Studies (FLAS) Fellowship, Arabic Summer Workshop: Level 2, Indiana University • Summer 2020  
Teaching Fellowship. Department of Spanish and Portuguese, Indiana University • 2019 – 2022

## University Teaching

At Indiana University, Bloomington, IN (2019–Present)  
CSCI 490: Introduction to Generative Artificial Intelligence  
ANTH 122: Interpersonal Communication, Department of Anthropology (Fall 2023, Spring 2024)  
HISP 280: Grammar in Context (Fall 2021, Spring 2022)  
HISP 200: Basic Language IV, Department of Spanish and Portuguese (Spring 2020, Summer 2021)  
HISP 105: Accelerated Basic Language I, Department of Spanish and Portuguese (Fall 2019, Spring 2020)

## Invited Talk

“Making Use of Computational Tools for Language Documentation” with Shobhana L. Chelliah, International Training Program on Computational Linguistics, Guwahati University, August 2025  
“Balancing Multilabel Datasets for Effective Hate Speech Detection: A Study on Gab” - *Clingding*, Computational Linguistics Lab, Indiana University - Bloomington, February 2025  
“Dependency-Informed Attention for Multilingual Grammar Error Correction” - *Clingding*, Computational Linguistics Lab, Indiana University - Bloomington, December 2024

## Reviewing

International Conference on Language Resources and Evaluation (LREC) [1] 2025  
Workshop on Online Abuse and Harms (WOAH) [1] ACL 2025  
Linguistic Annotation Workshop (LAW)[1] ACL 2025  
International Conference on Computational Linguistics (COLING) [1] 2024

## Service

Competition Judge, Women's Research Poster Competition, Center of Excellence for Women and Technology, Indiana University - Bloomington, April 2025