Lauren Elizabeth Levine

lauren-lizzy-levine.github.io google scholar lel76@georgetown.edu

Education

| Ph.D., Georgetown University | Linguistics Concentration: Computational Linguistics Advisor: Amir Zeldes Dissertation Area: Bridging Anaphora GPA: 4.00/4.00 | 8/2021 – present (expected 2026) |
|---------------------------------|---|-------------------------------------|
| M.S., Georgetown University | Linguistics Concentration: Computational Linguistics GPA: 4.00/4.00 | 8/2021 – 12/2024 |
| B.A., Cornell University | Computer Science, Linguistics, Asian Studies Minor: Cognitive Science GPA: 3.96/4.30 | 8/2014 – 5/2018 |

Publications

ACL Conference and Workshop Papers

- [1] **Levine, Lauren**, Min, Junghyun, and Zeldes, Amir (2025) "Building UD Cairo for Old English in the Classroom". In: *Proceedings of SyntaxFest 2025*. Ljubljana, Slovenia.
- [2] **Levine, Lauren**, and Zeldes, Amir (2025) "Subjectivity in the Annotation of Bridging Anaphora". In: *Proceedings of the 19th Linguistic Annotation Workshop (LAW)* at ACL 2025. Vienna, Austria.
- [3] Levine, Lauren (2025) "A Cross-Genre Analysis of Discourse Relation Signaling in the GUM Corpus". In: Proceedings of the Society for Computation in Linguistics (SCiL) 2025. Eugene, OR, USA.
- [4] Scivetti, Wesley, **Levine, Lauren**, Schneider, Nathan (2025) "<u>Multilingual Supervision</u>

 <u>Improves Semantic Disambiguation of Adpositions</u>". In: *Proceedings of the 31st International Conference on Computational Linguistics*. Abu Dhabi, UAE.
- [5] **Levine, Lauren**, and Zeldes, Amir (2024) "<u>Unifying the Scope of Bridging Anaphora Types in English: Bridging Annotations in ARRAU and GUM</u>". In: *Proceedings of the Seventh*

- Workshop on Computational Models of Reference, Anaphora and Coreference (CRAC 2024) at EMNLP 2024. Miami, USA. Best Paper Award at CRAC 2024
- [6] Yang Janet Liu, Tatsuya Aoyama, Wesley Scivetti, Yilun Zhu, Shabnam Behzad, Lauren Levine, Jessica Lin, Devika Tiwari, and Amir Zeldes (2024) "GDTB: Genre Diverse Data for English Shallow Discourse Parsing across Modalities, Text Types, and Domains". In: Proceedings of the 2024 Conference on Empirical Methods in Natural Language Processing. Miami, USA.
- [7] Levine, Lauren, Li, Cindy, BremerMcCollum, Lydia, Wagner, Nicholas, and Zeldes, Amir (2024) "Lacuna Language Learning: Leveraging RNNs for Ranked Text Completion in Digitized Coptic Manuscripts". In: Proceedings of the 1st Workshop on Machine Learning for Ancient Languages (ML4AL 2024) at ACL 2024. Bangkok, Thailand, 61–70.
- [8] Levine, Lauren (2023) "Difficulties in Handling Mathematical Expressions in Universal Dependencies". In: *Proceedings of the 17th Linguistic Annotation Workshop (LAW)* at ACL 2023. Toronto, Canada, 19–30.
- [9] Aoyama, Tatsuya, Behzad, Shabnam, Gessler, Luke, **Levine, Lauren,** Lin, Jessica, Liu, Yang Janet, Peng, Siyao, Zhu, Yilun, and Zeldes, Amir (2023) "GENTLE: A Genre-Diverse Multilayer Challenge Set for English NLP and Linguistic Evaluation". In: *Proceedings of the 17th Linguistic Annotation Workshop (LAW)* at ACL 2023. Toronto, Canada, 166–178.
- [10] **Levine, Lauren** (2022) "The Distribution of Deontic Modals in Jane Austen's Mature Novels". In: Proceedings of the 6th Joint SIGHUM Workshop on Computational Linguistics for Cultural Heritage, Social Sciences, Humanities and Literature at COLING 2022. Gyeongju, Republic of Korea, 70–74.
- [11] Levine, Lauren (2022) "Sharing Data by Language Family: Data Augmentation for Romance Language Morpheme Segmentation". In: Proceedings of the 19th SIGMORPHON Workshop on Computational Research in Phonetics, Phonology, and Morphology at NAACL 2022. Seattle, WA, 117-123.
- [12] Gessler, Luke, **Levine, Lauren** and Zeldes, Amir (2022) "<u>Midas Loop: A Prioritized</u>

 <u>Human-in-the-Loop Annotation System for Large Scale Multilayer Data</u>". In: *Proceedings of*the 16th Linguistic Annotation Workshop (LAW) at LREC 2022. Marseille, France, 103-110.

Teaching

As a Research Mentor at Georgetown University

Research-based Undergraduate Linguistics Experience (RULE)
 Mentored undergraduate students (2) in linguistic annotation and computational
 research skills

As a Teaching Assistant at Georgetown University

Computational Corpus Linguistics

 Guest lecture, office hours, grading, course facilitation

 Introduction to Natural Language Processing (taught in Python)

 Guest lecture, office hours, grading, course facilitation

 Introduction to Language (undergraduate intro to linguistics)

 Fall 2023
 Regular lecturing, office hours, grading, creation of course materials

 Intensive First Level Japanese I
 Fall 2023

Intensive First Level Japanese I

Drill Instructor: conducted weekly session for oral practice

Academic Service

Georgetown University

Corpus Resource Coordinator
 Managed and added to GU hosted linguistic corpora
 Faculty Search Assistant
 Facilitated logistics and communication for Computational
 Linguistics faculty member search
 Event Management Assistant, Georgetown University Round
 Table (GURT)
 Coordinated logistics for the GU conference on computation and corpus linguistics.

Social Chair, Georgetown University Computational
 Einguistics (GUCL)
 Coordinated CL community networking and social events

Service to the Field

| North American Computational Linguistics Olympiad (NACLO) Organizer | 2024, 2025 |
|---|---|
| • Reviewer, ACL Rolling Review (ARR) | 2025 |
| Reviewer, Linguistic Annotation Workshop (LAW) | 2025 |
| • Reviewer, Student Research Workshop (SRW) | 2025 |
| ACL Student Volunteer | 2023 |
| Professional Experience | |
| The MITRE Corporation, Bedford, MA | |
| • Senior Computational Linguist Applied NLP techniques and statistical analysis to the evaluation of identity matching and identity resolution systems for government stakeholders | 4/2020 - Present (Part-time from 9/2021) |
| • Software Engineer Delivered software tools for dataset annotation using Agile development practices | 9/2018 - 4/2020 |
| Awards and Grants | |
| Best Paper Award at CRAC 2024 at EMNLP | 2024 |
| • GradGov-GSAS Research Project Award Competitive Research Grant from Georgetown Graduate School of Arts and Sciences | Spring 2025 |
| • Georgetown Linguistics Department Travel Grant Granted for travel to EMNLP 2024, Miami, FL, USA | Fall 2024 |
| • Georgetown Linguistics Department Travel Grant Granted for travel to ACL 2023, Toronto, Canada | Fall 2023 |
| • Georgetown Linguistics Department Travel Grant Granted for travel to LREC 2022, Marseille, France | Fall 2022 |

Corpora

Editor

- <u>GUM</u>: The Georgetown University Multilayer Corpus a multilayer, class-sourced corpus of English Web genres
- GENTLE: Genre Tests for Linguistic Evaluation a multilayer annotated corpus of unusual English genres

Software

Developer

- <u>GitDox</u> version controlled online xml editor for multilayer annotation
- <u>MidasLoop</u> version-controlled online annotation environment for multilayer corpus data which includes confidence metadata for annotations

Membership in Professional Societies

- Association for Computational Linguistics (ACL, since 2022)
- Linguistic Society of America (since 2024)

Technical Skills

- Programming Languages: Python, R, Java, JavaScript, SQL, C++, MATLAB
- ML/Deep Learning: PyTorch, TensorFlow, Huggingface, Transformers
- Data Science: Statistics, Pandas, NumPy, SciPy, scikit-learn, matplotlib, Seaborn

Languages

Native: English

Advanced knowledge: French, Japanese

Ancient languages (basic reading): Coptic, Middle Egyptian