# Siyu Liang

liangsy at uw.edu • siyuliang.github.io 3940 Benton Ln NE, Room 407, Seattle, WA 98105, United States

### Education

2021 – Present University of Washington – Seattle, WA

Ph.D. in Computational Linguistics

Advisors: Drs. Gina-Anne Levow & Richard Wright

2025 **University of Washington** – Seattle, WA

M.S. in Computational Linguistics

2020 **Georgetown University** – Washington, DC

B.A. in Linguistics with minors in Persian & Computer Science

Advisor: Dr. Elizabeth Zsiga

### **Publications**

**Siyu Liang**, Nicolas Ballier, Gina-Anne Levow, Richard Wright. 2025. Beyond WER: Probing Whisper's Sub-token Decoder Across Diverse Language Resource Levels. In *Proceedings of the 2025 Conference on Empirical Methods in Natural Language Processing*, Association for Computational Linguistics, Suzhou, China. SAC HIGHLIGHT AWARD

**Siyu Liang**, Gina-Anne Levow. 2025. Breaking the Transcription Bottleneck: Finetuning ASR Models for Extremely Low-Resource Fieldwork Languages . In *Proceedings of the 4th Workshop on NLP Applications to Field Linguistics (FieldMatters)*, Association for Computational Linguistics, Vienna, Austria.

**Siyu Liang**, Gina-Anne Levow. 2025. Tone in Perspective: A Computational Typological Analysis of Tone Function in ASR. In *Proceedings of the 7th Workshop on Research in Computational Linguistic Typology and Multilingual NLP (SIGTYP)*, Association for Computational Linguistics, Vienna, Austria.

**Siyu Liang**. 2020. Documenting Eynu: A Case Study of Language Contact. In *Proceedings of the 43rd Annual Penn Linguistics Conference*, Philedephia, USA.

#### Other Presentations

Trent Ukasick, **Siyu Liang**. 2025 (accepted). Interaction of Laryngeal Contrast and  $f_0$  in Gyegu Tibetan: Acoustic Evidence for a Fortis-lenis Split. In the 189 th Meeting of the Acoustical Society of America (ASA/ASJ Joint Meeting), Honolulu, Hawaii, USA. (Poster presentation)

**Siyu Liang**. 2025. Acoustic Correlates of Performed Sexual Orientation in Thai Media. In *New Ways of Analysing Variation Asia Pacific (NWAV-AP 8)*, Singapore. (Oral presentation)

**Siyu Liang**. 2023. A Phonological Account of Intervocalic Voicing in Yangon Burmese. In the 56th International Conference on Sino-Tibetan Languages and Linguistics (ICSTLL 56). (Oral presentation)

**Siyu Liang**. 2021. Incomplete Vowel Assimilation in Tehrani Persian. In *the 4th Conference of Central Asian Language and Linguistics (ConCALL-4)*. (Oral presentation)

# Other Projects

September 2024

SocioLinx:

- Present

PI: Dr. Alicia Beckford Wassink (University of Washington)

A large-scale sociophonetic analysis of ASR errors for speech by underrepresented regional and ethnic groups of English speakers in the US. Designing linguistically informed benchmark for ASR models based on proprietary dataset. Developing speech models to handle dialectical variation in English.

September 2023

TurkicNLP at UW

- Present

PI: Dr. Talant Mawkanuli (University of Washington)

Building multilingual speaking dictionaries for Turkic languages. Providing mentorship for undergraduate and graduate students on data annotation, NLP pipeline, and digital humanities practices.

# Teaching

Spring 2026

LING 471: Computational Methods for Linguists, University of Washington (Instructor of Record, scheduled)

Winter 2024	LING 572: Advanced Statistical Methods in Natural Language Processing, University of Washington (Teaching Assistant)
Autumn 2023 Autumn 2025	LING 570: Shallow Processing Techniques for Natural Language Processing, University of Washington (Teaching Assistant)
Spring 2023	LING 471: Computational Methods for Linguists, University of Washington (Teaching Assistant, guest lecture on Statistics Basics for NLP)
Spring 2022 Autumn 2021	LING 200: Introduction to Linguistics, University of Washington (Teaching Assistant, with teaching duties twice weekly)
Winter 2022	LING 461: Syntax I (Grader)
	Industry experience
Summer 2020	ByteDance – Beijing, China NLP Engineer Intern Building a FrameNet-based intent framework for large-scale dialog systems. Developing an extendable symbol set for multilingual NLP tasks.
	Honors and scholarships
2024	Imre Boba Summer Research Fellowship (\$1000, University of Washington)
2024 2021	-
	Imre Boba Summer Research Fellowship (\$1000, University of Washington)
2021	Imre Boba Summer Research Fellowship (\$1000, University of Washington) ConCALL-4 Travel Award (\$500)
2021 2019	Imre Boba Summer Research Fellowship (\$1000, University of Washington) ConCALL-4 Travel Award (\$500) Royden B. Davis Fellowship (\$5000, Georgetown University)
2021 2019	Imre Boba Summer Research Fellowship (\$1000, University of Washington) ConCALL-4 Travel Award (\$500) Royden B. Davis Fellowship (\$5000, Georgetown University) Lisa J. Raines Fellowship (\$5000, Georgetown University)
2021 2019 2018	Imre Boba Summer Research Fellowship (\$1000, University of Washington)  ConCALL-4 Travel Award (\$500)  Royden B. Davis Fellowship (\$5000, Georgetown University)  Lisa J. Raines Fellowship (\$5000, Georgetown University)  Talks and tutorials  Analyzing Whisper Across Diverse Language Resource Levels  Workshop on Promoting Fairness for Under-represented Languages in Multilingual

## Mentorship

2024 – 2025 Ezra Mason, Linguistics Undergraduate Research Apprenticeship (LURAP) on *Automatic Segmentation of Tuvan* 

2024 – 2025 Melody Vahadi, M.S. project on OCR for Chaghatay

### Service

2025 Editor, Proceedings of the 43rd West Coast Conference on Formal Linguistics

2023 – 2024 Treasurer, Linguistic Society of the University of Washington (LSUW)

### Technical skills

#### **Programming languages**

Proficient in: Python.

Familiar with: C++, Java, JavaScript, R.

#### Software

ELAN, Praat

### **Natural Languages**

Proficient: Mandarin, English

Advanced: Persian, French (reading)

Intermediate: Thai, Tibetan, Vietnamese, Indonesian, Japanese

Elementary: Burmese, Uyghur, Uzbek, Arabic, Amharic, Turkish, Russian, Por-

tuguese, Swahili

Experience: Chaghatay, Nepali, Mongolian, etc. Fieldwork: Nobiin, Persian, Tibetan, Tuvan.