Curriculum Vitae

Hakyung Sung

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CONTACT

Department of Second Language Studies
College of Arts, Languages, & Letters
University of Hawai'i at Mānoa
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- Website: http://hksung.github.io

EDUCATIONS

Jun. 2025 — University of Oregon
Ph.D. Linguistics

Dec. 2024 — University of Oregon
M.S. Computer Science

Feb. 2018 — Seoul National University
M.A. English Education

Feb. 2016 — Ewha Womans University
B.A. English Language and Literature

PROFESSIONAL APPOINTMENTS

Aug. 2026 - Assistant Professor, Department of Second Language Studies, University of Hawai'i at Mānoa

Aug. 2025 - Jul. 2026 Assistant Professor, Department of Psychology, Rochester Institute of Technology
- Joint appointment with the Department of Modern Languages and Cultures
- Affiliated with AI MS program, Center for Human-aware AI

EXTERNAL FELLOWSHIP

- PI (2024.9 - 2025.6). *Evaluating argument structure construction-based indices for construct validity in assessing second language grammatical proficiency.* Supervisor: Kristopher Kyle (University of Oregon); Mikyung K. Wolf & Ikkyu Choi (ETS). Harold Gulliksen Psychometric Research Fellowship sponsored by ETS ($33,000)

GRANTS

- PI (2026.2 - 2027.7). *Corpus-based benchmarks to measuring second language Korean sophistication in speaking and writing tasks*. Sponsored by the Academy of Korean Studies ($23,966)
- Co-researcher (2024.2 - 2025.1). *Towards inclusive NLP research: Developing language models on second language Korean*. PI: Gyu-Ho Shin (University of Illinois Chicago). Sponsored by the Academy of Korean Studies ($13,200)

HONORS / AWARDS / INTERNAL GRANTS

- *College of Liberal Arts Catalyst Humanities Grant* (2026). Rochester Institute of Technology
- *College of Liberal Arts Faculty Research Fund* (2025). Rochester Institute of Technology
- *College of Liberal Arts JumpStart Fund* (2025). Rochester Institute of Technology
- *Professional Development Graduate Scholarship* (2023). University of Oregon
- *Raymund Fellowship* (2021). University of Oregon
- *Promising Scholar Award* (2021). University of Oregon
- *Lockey Graduate Science Award* (2021). University of Oregon
- *Top-off Award in Linguistics Department* (2021). University of Oregon
- *Excellence of Academics* (2017), Seoul National University
- *Scholarship of Graduate Student Instructor* (2017), Seoul National University

PEER-REVIEWED PUBLICATIONS

†Advised student author

Journal articles

[J12] Kyle, K., & **Sung, H.**, (*Accept*). Using encoder-based and generative large language models to facilitate linguistic annotation. *Applied Linguistics.*

[J11] Kyle, K., & **Sung, H.**, (*Accept*). Evaluating the relationship between argument structure construction use and L2 writing proficiency. *Language Learning.*

[J10] **Sung, H.,** & Shin, G-H. (2026). Developing and validating lexical complexity indices for Korean. *Research Methods in Applied Linguistics*. https://doi.org/10.1016/j.rmal.2026.100359

[J9] Diantoro, C., **Sung, H.**, & Baese-Berk, M. (2026). L1 framing typology and acoustic differences in L2 speech: Insights from Motion Constructions. *Language and Speech.* https://doi.org/10.1177/00238309261472885

[J8] **Sung, H.,** Shin, G-H., Jung, B-K., & Shin, J-E. (2026). L2K-ARG: Introducing and Evaluating a Learner Corpus of Korean Argumentative Writing. *International Journal of Learner Corpus Research.* https://doi.org/10.1075/ijlcr.26007.sun

[J7] Kang, S., Sung, M-C., & **Sung, H.** (2026). Exploring the Impact of GPT-API Chatbots on Young L2 Writers' Revision and Editing Through Complexity, Cohesion, and Accuracy Analysis. *International Journal of Applied Linguistics. https://doi.org/10.1111/ijal.70275*

[J6] **Sung, H.,** & Shin, G-H. (2025). Towards robust morphosyntactic analysis of L2 Korean: Evaluating and fine-tuning a Korean language model. *Transactions on Asian and Low-Resource Language Information Processing*. https://dl.acm.org/doi/10.1145/3767330

[J5] **Sung, H**., Wolf, MK. Suhan, M, & Kyle, K. (2025). Lexical richness in young English learners' writing: A focus on Opinion and Listen-Write task types. *Assessing Writing*. https://doi.org/10.1016/j.asw.2025.100975

[J4] **Sung, H**., & Kyle, K. (2025). Usage-based analysis of L2 oral proficiency: Characteristics of argument structure construction use. *Studies in Second Language Acquisition*. https://doi.org/10.1017/S0272263125100995

[J3] **Sung, H**., Cho, S., & Kyle, K. (2024). An empirical evaluation of lexical diversity indices in L2 Korean writing assessment. *Language Assessment Quarterly,* 1-22. https://doi.org/10.1080/15434303.2024.2311728

[J2] Kyle, K., **Sung, H.**, Eguchi, M., & Zenker, F. (2024). Evaluating evidence for the reliability and validity of lexical diversity indices in L2 oral task responses. *Studies in Second Language Acquisition*, 1-22. https://doi.org/10.1017/S0272263123000402

[J1] **Sung, H.** (2019). Korean EFL learners' processing of English caused-motion construction. *English Teaching, 74*(1), 49-73.

Conference papers

[C13] Shin, G-H., & **Sung, H.**, (*Accept*). Distributional rigidity vs. cognitive equilibrium: Human good-enough processing meets LLM surprisal in Korean. In *Proceedings of the 40th Pacific Asia Conference on Language, Information and Computation*.

[C12] †Mattu, K., †Dhall, A., †Naguru, A., †Sehgal, S., †Gowda, T., & **Sung, H.** (2026). Shared Task: L1-Aware English vocabulary difficulty prediction with hybrid transformer and psycholinguistic features. In *Proceedings of the 21st Workshop on Innovative Use of NLP for Building Educational Applications*. https://aclanthology.org/2026.bea-1.69/

[C11] **Sung, H**., & Shin, G-H. (2026). Parser agreement and disagreement in L2 Korean UD: Implications for human-in-the-loop annotation. In *Proceedings of the 20th Linguistic Annotation Workshop (LAW-XX).* https://arxiv.org/abs/2605.06625

[C10] **Sung, H**., & Kyle, K. (2025). ASC analyzer: A Python package for measuring argument structure construction usage in English texts. In *Proceedings of the 2nd Workshop on Construction Grammars and NLP (CxGs+NLP)*. https://aclanthology.org/2025.cxgsnlp-1.5/

[C9] **Sung, H**., Csuros, K., & Sung, M-C (2025). Comparing human and LLM proofreading in L2 writing: Impact on lexical and syntactic features. In *Proceedings of the 20th Workshop on Innovative Use of NLP for Building Educational Applications*. https://aclanthology.org/2025.bea-1.2/

[C8] **Sung, H**., Shin, G-H., Lee C., Sung, Y-K., & Jung, B-K (2025). UD-KSL Treebank v1.3: A semi-automated framework for aligning XPOS-extracted units with UPOS tags. In *Proceedings of the 19th Linguistic Annotation Workshop (LAW-XIX).* https://aclanthology.org/2025.law-1.9/

[C7] **Sung, H**., & Shin, G-H. (2025). Second language Korean Universal Dependency treebank v1.2: Focus on data augmentation and annotation scheme refinement. In *Proceedings of the Workshop on Resources and Representations for Under-Resourced Languages and Domains (RESOURCEFUL-2025).* https://aclanthology.org/2025.resourceful-1.4/

[C6] **Sung, H**., & Kyle, K. (2024). Leveraging pre-trained language models for linguistic analysis: A case of argument structure constructions. In *the Association for Computational Linguistics: EMNLP 2024*. https://aclanthology.org/2024.emnlp-main.415/

[C5] **Sung, H**., & Shin, G-H. (2024). Constructing a dependency treebank for second language learners of Korean. In *Proceedings of the International Conference on Language Resources and Evaluation (LREC-COLING 2024).* https://aclanthology.org/2024.lrec-main.332/

[C4] **Sung, H**., & Kyle, K. (2024). Annotation scheme for English argument structure constructions treebank. In *Proceedings of the 18th Linguistic Annotation Workshop (LAW-XVIII).* https://aclanthology.org/2024.law-1.2/

[C3] **Sung, H**., & Shin, G-H. (2023). Diversifying language models for lesser-studied languages and language-usage contexts: A case of second language Korean. In *Findings of the Association for Computational Linguistics: EMNLP 2023*. https://aclanthology.org/2023.findings-emnlp.767/

[C2] **Sung, H**., & Shin, G-H. (2023). Towards L2-friendly pipelines for learner corpora: A case of written production by L2-Korean learners. In *Proceedings of the 18th Workshop on Innovative Use of NLP for Building Educational Application*, 72-82, Association for Computational Linguistics. https://aclanthology.org/2023.bea-1.6/

[C1] Kyle, K., & **Sung, H.** (2023). An argument structure construction treebank. In *Proceedings of the Workshop on Construction Grammars and NLP (CxGs+NLP, GURT)*, 51–62, Association for Computational Linguistics. https://aclanthology.org/2023.cxgsnlp-1.7/

Book chapter

[B1] Kyle, K., & **Sung, H.**, (2026). *Tagging and Parsing*. International Encyclopedia of Language and Linguistics, 3rd Edition. https://doi.org/10.1016/B978-0-323-95504-1.01605-7

WORKSHOPS

- Shin, G-H. & **Sung, H.** (Aug. 2026). *Corpus Linguistics for Korean with Universal Dependencies: Concepts and Hands-On Practice.* Pre-conference workshop at the 33rd Japanese/Korean Linguistics Conference. University of Illinois Urbana–Champaign. Urbana, IL. https://github.com/hksung/33JKConference_KoreanWorkshop
- **Sung, H.** & Kyle, K. (Sep. 2024). *The construction of high-quality manually annotated datasets for fine-tuning LLMs for automatic linguistics analyses.* Workshop at 16th American Association for Corpus Linguistics Conference (AACL 2024). University of Oregon. Eugene, OR. https://github.com/hksung/AACL24-Workshop

INVITED TALK

- *Leverage LLMs in Learner Corpus Research* [대규모 언어 모델을 활용한 학습자 코퍼스 연구]. Center for Foreign Language Education, Seoul National University. May 22, 2026.

PRESENTATIONS

Main presenter

[16] **Sung, H**., & Kyle, K. (Mar. 2027). *Measuring contextualized phraseological patterns with language models.* Paper presenting at AAAL 2027. Atlanta, GA.

[15] **Sung, H**., & Shin, G-H. (Sep. 2026). *L2K-ARG: An open-access learner corpus of Korean argumentative writing*. Paper presenting at Learner Corpus Research Conference 2026. Prague, Czech Republic.

[14] **Sung, H**., & Shin, G-H. (Jun. 2026). Assessing the association strength of morpheme bigrams and their relationship to second language Korean proficiency. Paper presenting at EuroSLA 35, Lisbon, Portugal.

[13] **Sung, H**., & Kyle, K. (Apr. 2026). *Leveraging masked language models to measure association strength in contiguous and dependency bigrams.* Poster presenting at AACL 2026. Gainesville, FL.

[12] **Sung, H**., & Shin, G-H. (Apr. 2026). *Measuring lexical complexity in L2-Korean writing through a morpheme-aware approach.* Paper presenting at AACL 2026. Gainesville, FL.

[11] **Sung, H**., & Kyle, K. (Sep. 2025). *Evaluating grammatical complexity in L2 writing: Introducing the Argument Structure Construction Analyzer*, Paper presenting at SLRF 2025, Flagstaff, AZ.

[10] **Sung, H**., & Shin, G-H. (Jun. 2025). *To what extent do lexical richness indices explain learner proficiency? An example from L2-Korean writing.* Paper presenting at EuroSLA 34, Tromsø, Norway.

[9] **Sung, H**., & Wolf, M., Suhan, M., & Kyle, K. (Mar. 2025). *Investigating the lexical characteristics of young EFL students' writing across different test tasks.* Paper presenting at AAAL 2025. Denver, CO.

[8] **Sung, H**., & Kyle, K. (Sep. 2024). *Building a robust argument structure construction (ASC) treebank and an automatic ASC tagger.* Paper presenting at AACL 2024. Eugene, OR.

[7] **Sung, H.** (Apr. 2024). *Exploring the relationship between argument structure construction usage and L2 English proficiency.* Paper presenting at LARC 2024. Provo, UT.

[6] **Sung, H**., & Kyle, K. (Mar. 2024). *The relationship between L2 oral proficiency interview scores and characteristics of argument structure construction use.* Paper presenting at AAAL 2024. Houston, TX.

[5] **Sung, H.,** & Shin, G-H. (Sep. 2023). *Comparison of morphological analyzers for L2-Korean written corpora*. Poster presenting at EuroSLA 32, Birmingham, UK.

[4] **Sung, H**., & Kyle, K. (May. 2023). *Automatic identification of motion constructions in L1 and L2 English spoken corpora*. Paper presenting at ICCG12. Prague, Czech Republic.

[3] **Sung, H.,** & Kyle, K. (Mar. 2023). *Exploring evenness lexical diversity indices in L2 written and spoken corpora.* Paper presenting at AAAL 2023. Portland, OR.

[2] **Sung, H.** (Sep. 2022). *On the development of motion constructions of Korean L2 English learners: A cross-sectional spoken corpus-based study.* Paper presenting at AACL 2022. Flagstaff, AZ.

[1] **Sung, H.,** & Cho, S. (Aug. 2022). *Evaluating lexical diversity of Korean as a second language learners' writing using NLP tool.* Paper presenting at EuroSLA 31. Fribourg, Switzerland.

Not main presenter

[11] Egbert, J., &. **Sung, H.** (Apr. 2026). *Register as a predictor of argument structure construction use.* Paper presenting at AACL 2026. Gainesville, FL.

[10] Egbert, J., &. **Sung, H.** (Mar. 2026). *Register as a predictor of argument structure construction use.* Paper presenting at AAAL 2026. Chicago, IL.

[9] Kyle, K., **Sung, H**., Biber, D., Reppen, R., & Egbert, J. (Mar. 2025). *The development and evaluation of an open-source lexicogrammatical complexity analysis tool: The Lexicogrammatical Tagger.* Paper presenting at AAAL 2025. Denver, CO.

[8] Diantoro, C., **Sung, H.,** & Baese-Berk, M. (May. 2024). *Differences in prominence-related acoustic measurements in L2 read speech as a function of L1 framing typology.* Poster presenting at ASA. Ottawa, Canada.

[7] Kyle, K., **Sung, H**., & Eguchi, M. (Mar. 2024). *Identifying lexico-grammatically ambiguous language features using large language models.* Invited colloquium at AAAL 2024. Houston, TX.

[6] Kyle, K., & **Sung, H**. (Mar. 2024). *The relationship between L2 holistic writing proficiency scores and characteristics of argument structure construction use.* Paper presenting at AAAL 2024. Houston, TX.

[5] Kyle, K., & **Sung, H**. (May. 2023). *Robust automatic annotation of argument structure constructions*. Paper presenting at ICCG12. Prague, Czech Republic.

[4] Kyle, K., **Sung, H.**, Eguchi, M., & Zenker, F. (Mar. 2023). *The reliability and validity of lexical diversity indices in second language oral productions.* Paper presenting at AAAL 2023. Portland, OR.

[3] Diantoro, C., **Sung, H.**, & Baese-Berk, M. (Mar. 2023). *Comparing stress patterns of verbs and satellites in L1/L2 spoken corpora based on framing typology.* Poster presenting at AAAL 2023. Portland, OR.

[2] Kyle, K., **Sung, H.**, Eguchi, M., & Zenker, F. (Sep. 2022). *Evaluating the reliability and validity of lexical diversity indices in second language oral corpora.* Paper presenting at AACL 2022. Flagstaff, AZ.

[1] Cho, S., & **Sung, H.** (Sep. 2022). *Investigating lexical diversity in L2 Korean writing: Focusing on multiple indices and Korean tokenizers.* Paper presenting at AACL 2022. Flagstaff, AZ.

THESIS

- Sung, H. (2025). *Measuring lexicogrammatical complexity and sophistication in second language English production: Development and validation of argument structure construction-based indices.* (Unpublished doctoral dissertation). University of Oregon. Advisor: Dr. Kristopher Kyle. https://scholarsbank.uoregon.edu/items/d762cf19-f3c8-47a0-9357-73f1b5f549d8
- Sung, H. (2018). *Korean EFL learners' processing of English caused-motion construction*. (Unpublished master's thesis). Seoul National University. Advisor: Dr. Hyun-Kwon Yang. https://s-space.snu.ac.kr/handle/10371/142034

OTHER RESEARCH PRODUCTS

- *English ASC treebank*: The ASC Treebank is a linguistically annotated dataset of argument structure constructions (ASCs), informed by research in the usage-based constructionist approach to language learning. Developed in collaboration with Kris Kyle (University of Oregon). https://github.com/LCR-ADS-Lab/ASC-Treebank
- *English ASC analyzer:* The ASC analyzer is a publicly available Python package designed to automatically tags ASCs and computes 50 indices that capture diversity, proportion, frequency, and ASC-verb lemma association strength. Developed in collaboration with Kris Kyle (University of Oregon). https://github.com/hksung/ASC-analyzer
- *UD Korean-KSL*: This UD Korean-KSL is a dependency treebank of L2 Korean, featuring morpheme and Universal Dependency manual annotations. Developed in collaboration with Gyu-Ho Shin (University of Illinois Chicago). https://github.com/UniversalDependencies/UD_Korean-KSL/tree/dev
- *Korean lexical complexity analyzer*: The Korean lexical complexity analyzer calculates a variety of lexical complexity indices for Korean, operationalizing lexical complexity at both the word and morpheme levels to reflect the agglutinative nature of the language. https://github.com/hksung/Korean-lexical-complexity-analyzer

TEACHING EXPERIENCE

UG: Undergraduate, G: Graduate

- University of Hawai'i at Mānoa
  - SLS-480R *Introduction to Computational Corpus Linguistics* (UG/G, Spring 27)
  - SLS-170 *Language by the Numbers* (UG, Spring 27)
  - SLS-775 *Natural Language Processing in Corpus Research* (G, Fall 26)

- Rochester Institute of Technology
  - PSYC-681 *Natural Language Processing and Large Language Models I* (G, Spring 26)
  - LING-351 *Language Technology and Large Language Models* (UG, Fall 25)
  - LING-581 *Natural Language Processing I* (UG, Fall 25)

- University of Oregon
  - LING-150 *The Structure of English Words* (UG, Fall 24)

MENTORING EXPERIENCE

- Rochester Institute of Technology
  - Research Experiences for Undergraduates (REU) program (Jun. 2026 - Jul. 2026)

- Champ, Jovan (UG, University of Massachusetts Lowell)
- Kan, Calvin (UG, University of Washington)
- Kumar, Arjun (UG, University of California San Diego)

– Honors research (Sep. 2025 - Apr. 2026)
- Moll, Sam (UG, Computer Science, Rochester Institute of Technology)

PROFESSIONAL EXPERIENCE

Jun. 2024 - Jul. 2024 Summer Intern, ETS

Jun. 2022 - Aug. 2022 Summer Intern, The American Council on the Teaching of Foreign Languages (ACTFL)

Oct. 2021 - Sep. 2022 Electronic Resources Student Assistant, University of Oregon Library

Mar. 2020 - Feb. 2021 English Teacher, Daewon Foreign Language High School, South Korea

Mar. 2018 - Feb. 2020 English Teacher, Gyeonggi Academy of Foreign Languages, South Korea

PROFESSIONAL SERVICES

Upon request *Ad-hoc* Reviewer

- **Journal manuscript**: *Applied Linguistics*, *Assessing Writing*, *Bilingualism: Language and Cognition*, *BMC Psychology*, *Cognitive Computation*, *Corpus Pragmatics*, *Educational Assessment*, *International Review of Applied Linguistics in Language Teaching*, *Journal of Second Language Writing*, *Language Assessment Quarterly*, *Language Learning*, *Language Resources and Evaluation, Language Teaching Research*, *Language Testing in Asia*, *Linguistics Vanguard*, *Natural Language Processing*, *Research Methods in Applied Linguistics*, *Studia Linguistica*, *Studies in Second Language Acquisition*, *System, TESOL Quarterly*, *Transactions on Asian and Low-Resource Language Information Processing*
- **Conference papers**: *ASSOCIATION FOR COMPUTATIONAL LINGUISTICS Rolling Review, Linguistic Annotation Workshop, Midwest Association of Language Testers (MwALT) Best Student Paper, Workshop on Innovative Use of NLP for Building Educational Application*
- **Conference abstract**: *International American Association for Corpus Linguistics (AACL) Conference*, *The Second Language Research Forum (SLRF)*

Jan. 2026 - Mar. 2027 Guest Editor (co-editor with Gyu-Ho Shin). Corpus-based approaches to Lx morphosyntactic acquisition in underrepresented languages and usage contexts. *Applied Corpus Linguistics*.

Dec. 2024 - Oct. 2026 Student Editorial Board Member, *Journal of Second Language Writing*

Sep. 2024 Conference Committee, the 16th *American Association for Corpus Linguistics Conference*

Jan. 2022 - Jun. 2023 Graduate Student Faculty Representative Liaison, Linguistics, University of Oregon

Mar. 2017 - Feb. 2018 Graduate Student Instructor, Seoul National University

OTHER SKILLS

- Languages: Korean (Native), English (Advanced), Spanish (Basic)
- Programming Languages: Python, R