CHEONKAM JEONG Ph.D.

cheonkaj@hs.uci.edu
LinkedIn
Google Scholar

EDUCATION

The University of Arizona — Tucson, AZ
Ph.D. in Linguistics — 2018–2024
- Dissertation: The Effects of Lexical Competition on Hyperarticulation of Voice Onset Time and Fundamental Frequency in Korean Stops: Experimental and Big Data Approaches (Advisor: Dr. Andrew Wedel)
- Research areas: Phonology, Computational Linguistics

The University of Arizona — Tucson, AZ
M.S. in Human Language Technology — 2020–2021
- Internship Report: A semantic analysis of FindingFive support tickets using machine learning-based classifiers (Advisor: Dr. Andrew Wedel)
- Research areas: Natural Language Processing, Machine Learning

Hankuk (Korea) University of Foreign Studies — Seoul, South Korea
M.A. in English Linguistics — 2015–2017
- Thesis: Noisy Harmonic Grammar Modeling of Flapping in American English Based on a Statistical Analysis (Advisor: Dr. Sung-Hoon Hong)
- Research areas: Phonology, Quantitative Linguistics

Hankuk (Korea) University of Foreign Studies — Seoul, South Korea
B.A. in English Linguistics — 2010–2015
- Research areas: English Linguistics, Philosophy

University of Leicester — Leicestershire, UK
Visiting Student Program — Fall 2013
- Department of English Literature (13th representative scholar sponsored by MIRAE ASSET)

PROFESSIONAL EXPERIENCE

Postdoctoral Scholar - AI/ML Lead — Sue & Bill Gross School of Nursing, University of California, Irvine
Irvine, United States — 2024–Present
- Research areas: Healthcare AI/ML, NLP, Reinforcement Learning

Visiting Scholar — Department of Computer Science, Purdue University
West Lafayette, United States — 2024–Present
- Research areas: NLP, Reinforcement Learning

PUBLICATIONS

1. Pyarelal, A., Culnan, J. M., Qamar, A., Krishnaswamy, M., Wang, Y., **Jeong, C.**, Chen, C., Miah, M. M. M., Hormozi, S., Tong, J., & Huang, R. (2025). MultiCAT: Multimodal communication annotations for teams. In *Proceedings of the 2025 Annual Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics (NAACL)*. Association for Computational Linguistics. Proceedings available here.

2. Dumitru, R., Alexeeva, M., Alcock, K., Ludgate, N., **Jeong, C.**, Abdurahaman, Z. F., Puri, P., Krichhoff, B., Sadhu, S., & Surdeanu, M. (2024). Retrieval augmented generation of subjective explanations for socioeconomic scenarios. In *Proceedings of the Sixth Workshop on Natural Language Processing and Computational Social Science (NLP+CSS)*, pages 68–85, Mexico City, Mexico. Association for Computational Linguistics. Proceedings available here.

3. **Jeong, C.**, & Wedel, A. (2024). Applying big data and automation techniques in phonetics: A case study on hyperarticulation in Korean word-initial stops. In *Proceedings of the 19th Conference on Laboratory Phonology (LabPhon 19)*. Hanyang University, Seoul, South Korea. Proceedings available here.

4. Kwak, A., **Jeong, C.**, Vincent Forte, G., Bambauer, D., Morrison, C. T., & Surdeanu, M. (2023). Information extraction from legal wills: How well does GPT-4 do? In *Findings of the Association for Computational Linguistics: EMNLP 2023*, Singapore. Association for Computational Linguistics. Proceedings available here.

5. **Jeong, C.**, Schmitz, D., Kakolu Ramarao, A., Stein, A., & Tang, K. (2023). Linear discriminative learning: A competitive non-neural baseline for morphological inflection. In *Proceedings of the 20th SIGMORPHON Workshop on Computational Research in Phonetics, Phonology, and Morphology*, pages 138-150, Toronto, Canada. Association for Computational Linguistics. Proceedings available here.

6. **Jeong, C.**, & Wedel, A. (2023). The effect of cue-specific lexical competitors on hyperarticulation of VOT and F0 contrasts in Korean stops. In *Proceedings of the 2022 Annual Meeting on Phonology (AMP)*, Los Angeles, California. Proceedings available here.

7. **Jeong, C.**, & Wedel, A. (2023). The effect of cue-specific lexical competitors on hyperarticulation of VOT and F0 contrasts in Korean stops. Poster presented at *Hanyang International Symposium on Phonetics and Cognitive Sciences of Language 2023 (HISPhonCog 2023)*. Hanyang University, Seoul, South Korea.

8. **Jeong, C.**, & Park, S. (2018). A corpus-based study on the prosodic features of *com* in Korean. Poster presented at *92nd Annual Meeting of Linguistic Society of America (LSA)*, Salt Lake City, Utah. Proceedings available here.

9. **Jeong, C.**, & Park, S. (2017). The role of prosody in discourse: A case study of Korean *com*. In *Proceedings of 2017 Seoul International Conference on Speech Sciences (SICSS)*, pages 109-110, Seoul, South Korea. Proceedings available here.

10. Data Study Group Team. (2023). Data Study Group final report: Global Witness - Identifying unregulated mining sites using historical satellite data (Version 1). *Zenodo*. Paper available here..

11. **Jeong, C.**, & Hong, S. (2017). Corpus-based noisy harmonic grammar modeling of word-medial /t/-flapping in American English. *Studies in Phonetics, Phonology and Morphology*, 23(1), 117-143. Paper available here.

MANUSCRIPTS

1. **Jeong, C.**, Kim, S., & Park, J. (Under review). Beyond BPM Automation: Verifiable Neuro-Symbolic Agents with Montague Semantics. *The 41st ACM/SIGAPP Symposium On Applied Computing (SAC 2026)*.

2. Nyamathi, A., Rasouli, E., **Jeong, C.**, Brunswicker, S., Agapie, E., Ludlow, D., Jawad, A., Khay, N., Lu, L., Ding, C., Liao, F., Farahani, F., Lee, J., Dutt, A., Rahmani, A., & Krogh, P. (Under review). Evaluation of personas and daily activity maps for improved clinical care and training models for effective human-robot interaction for persons with dementia: A qualitative study. *Journal of Medical Internet Research (JMIR)*. Preprint available here.

3. **Jeong, C.**, & Brunswicker, S. (Under second-round review). LLM alignment for linguistic empathy using direct preference optimization. *The Association for the Advancement of Artificial Intelligence (AAAI)*.

4. **Jeong, C.**, & Wedel, A. (Under second-round review). The effect of contrast-specific minimal pair competitor in hyperarticulation of VOT and F0 phonetic cues in Korean initial stops in tonogenetic sound change. *Journal of Phonetics*. PHONETICS-D-24-00131.

5. (Preprint) **Jeong, C.**, Kim, S., & Park, J. (2025). The algebra of meaning: Why machines need Montague more than Moore's Law. *arXiv preprint*, Paper available here..

6. (Preprint) Kwak, A., **Jeong, C.**, Lim, J., & Min, B. (2024). A Korean legal judgment prediction dataset for insurance disputes. *arXiv preprint*, Paper available here..

7. (Preprint) Yoo, Y., **Jeong, C.**, Gim, S., Lee, J., Schimeke, Z., & Seo, D. (2023). A novel patent similarity measurement methodology: Semantic distance and technological distance. *arXiv preprint*, Paper available here..

INVITED TALKS   **Jeong, C.** (2025, May 20). Introduction to NLP and its Applications in Healthcare. *Sue & Bill Gross School of Nursing, University of California, Irvine.* Irvine, California, United States.

Jeong, C., Darling, M., & Dely, A. (2023). Enterprise AI: How are you addressing the new wave of computing? *Tucson's IT Networking Group LAMBDA.* Tucson, Arizona, United States.

Jeong, C., & Romero, D. (2022). Student internships in industry: Experiences and resources. *The Arizona Research Bazaar 2022.* Tucson, Arizona, United States. Slides

Jeong, C. (2022). 2020 NLP internship at FindingFive. *Master of Science in Human Language Technology*, University of Arizona. Tucson, Arizona, United States.

PROJECTS   **Emotional Intelligence for Empathetic Patient-Robot Interaction in the Setting of Dementia Patients**
University of California Noyce Initiative   June 2024–Present

Global Witness: Identifying unregulated mining sites using historical satellite data
Alan Turing Institute, United Kingdom   March 2023

Korean Education Dataset for Korean as Foreign Language Learners
the Ministry of Science and Information and Communication Technology & the National Information Society Agency in Korea   October 2022–May 2023
.

GRANT AND   **Saturn Cloud NVIDIA Academic Grants**
AWARDS   *Purdue University*   April–December 2025

MIRAE ASSET Student Exchange Program Scholarship
MIRAE ASSET, South Korea   2013

Second Distinction
Department of English Linguistics, Hankuk University of Foreign Studies   2011

MEMBERSHIP   Association of Computational Linguistics (ACL)
Linguistic Society of America (LSA)
Korean-American Scientists and Engineers Association (KSEA)

RESEARCH EXPERIENCE

NLP Engineer | FindingFive, New Jersey   June–August 2020
- Full-time Intern (40 hours per week), non-paid internship.
- Analyzed customer support ticket distribution using Zoho Desk APIs.
- Employed ML-based classifiers, including non-Neural Network and Neural Network models, to enhance customer service.

Research Associate: NLP Engineer, Developer | University of Arizona   2021–2024
- Annotated datasets for Causal Inference tasks and evaluated GPT-4 generated scenarios (Spring 2024).
- Developed Docker Compose files and PostgreSQL databases for efficient data annotation with Prodigy (Fall 2023).
- Collaborated in creating data pipelines for data engineering tasks to facilitate data annotation.
- Manually annotated datasets for Information Extraction from legal wills, including entities, binary relations, and n-ary events (2023).
- Conducted multimodal multitasks combining text and audio data; developed multitask models utilizing NN models and LLMs (2022-2023).
- Collaborated with speech team to improve unsupervised vocal entrainment detection models.
- Performed annotation tasks focusing on sentiment and emotion labeling for multimodal multitask models.

Research Associate: Phonetician | Douglass Phonetics Laboratory, University of Arizona
2021
- Designed and executed an online experiment on the FindingFive research platform
- Administered the experiment via Amazon Mechanical Turk for data collection efficiency and quality

SKILLS

Languages: English, Korean, Japanese, French.

Programming: `Python`, `R`, `Praat`, `SQL`, `Prolog`, `Perl`.

ACADEMIC SERVICES

Paper Reviewer for:

– IEEE Access: Specializing in NLP Papers   July 2023–Present
– Arizona Linguistics Circle 16: Phonetics & Statistical Modeling Proceedings Reviewer 2022
– Journal of Phonetics: Co-reviewer of PHONETICS-D-21-00128 with Dr. Andrew Wedel   2022
– Arizona Linguistics Circle 14, 15: Phonology & Phonetics Coyote Paper Reviewer 2021–2022
– Arizona Linguistics Circle 15: Phonetics & Corpus Linguistics Proceedings Reviewer 2021
– Arizona Linguistics Circle 14: Phonology & Phonetics Proceedings Reviewer   2020
– Arizona Linguistics Circle 13: Phonology Proceedings Reviewer   2019

Leadership and Communication:

– NAVER Boost Course: Coaching Study AI Basics 2023 - Team Leader   January 2023
– FindingFive: Outreach and Marketing Coordinator   March–August 2022
– Arizona CatCloud Service: Helped design the service with fellow student leaders.
– Arizona Linguistics Circle 15: Communication Coordinator   2021
– Arizona Linguistics Circle 13: Phonetics Section Chair   2019
– Education Supporter at Seoul Urban Science Technical High School in Seoul, South Korea   2013