

Jingying Hu

Curriculum Vitae

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Education

- 2027/5 (Exp.) **Ph.D. Linguistics**, *Purdue University*
- 2027/5 (Exp.) **M.S. Joint Statistics and Computer Science**, *Purdue University*
- 2022 **M.A. Teaching Chinese to Speakers of Other Languages**, *Peking University*
- 2019 **B.A. Chinese Linguistics & Literature**, *University of International Business and Economics*
- 2019 **B.A. Finance**, *University of International Business and Economics*

Areas of Interests

- Broad Psycholinguistics, Computational Linguistics, Chinese as a Second Language Acquisition
- Narrow bilingual sentence processing, individual differences, syntactic ambiguity, syntactic alternation, automatic essay scoring, AI interpretability, multilingual evaluation, social media text analysis
- Methods experimental methods (acceptability judgement, self-paced reading, eye-tracking)
computational modeling (natural language processing, machine learning, language models)

Publications (* Equal contribution)

Book Chapter

- In press Nie, D., Liu, Q., Jiang, D. Y., Yan, R., Zhang, Y., Fang, X., **Hu, J.**, Huang, X., & Yun, J. Human reviewers in an AI era: A methodological reflection on research synthesis In S. W. Chong (Ed.), *Research Synthesis Methodologies in Applied Linguistics*. pp. 330–347. John Benjamins.

Peer-reviewed Journal Articles

- 2026 **Hu, J.**, & Cong, Y. LLM-derived metrics in second language writing assessment: an explainable AI approach. *Computers & Education*, 105721.
- 2026 Cong, Y., **Hu, J.**, Reese, T., & Liu, H. How robust are linguistic markers of aging? The case of aging-related social media text. *Natural Language Processing Journal*. 14, 100203.
- 2023 Wang, Y., **Hu, J.**, An, Z., Li, C., & Zhao, Y. The influence of metacognition monitoring on L2 Chinese audiovisual reading comprehension. *Frontiers in Psychology*. 14, 1133003.

Peer-reviewed Conference Proceedings

- Accepted Osumi, A.*, **Hu, J.***, Cong, Y., & Fukada, A. Examining LLM-surprisal as an indicator of naturalness for Japanese automated essay scoring. *The Artificial Intelligence in Measurement and Education Conference (AIME-Con)*.
- Accepted **Hu, J.** & Issa, E. Where does the relative clause attach? Probing prosodic and semantic sensitivity in large audio language models. *The 3rd Conference on Language Modeling (COLM)*.
- 2025 **Hu, J.**, & Cong, Y. Modeling Chinese L2 writing development: The LLM-surprisal perspective. *Proceedings of the Workshop on Cognitive Modeling and Computational Linguistics (CMCL)*. pp. 172-183. Association for Computational Linguistics (ACL).

Peer-Reviewed Conference Abstracts

- 16 **Hu, J.**, Cheng, Y.-F., & Bui, M. (2026, April 24–25). *From exploratory data analysis to predictive modeling: A multi-stage data science workflow for second language speaking proficiency modelling*. Poster presented at Purdue Linguistics Symposium (PLS), Purdue University, United States.
- 15 Alladin, M. A., Naik, S., **Hu, J.**, & Liu, C. (2026, April 24). *Knowledge graph construction from domain science papers using structure-aware and hierarchical RAG chunking*. Poster presented at Midwest Data Day (MDD), University of Chicago, United States.
- 14 **Hu, J.**, & Cong, Y. (2026, April 14–15). *LLM-derived metrics in L2 writing assessment: an explainable AI approach*. Poster presented at Purdue AI Research Showcase, Purdue University, United States.
- 13 **Hu, J.**, Cong, Y., & Francis, E. J. (2026, March 26–28). *Relative clause extraposition in English: An information-theoretic approach*. Poster presented at the 39th Annual Conference on Human Sentence Processing (HSP), MIT, United States.
- 12 **Hu, J.**, Francis, E. J., & Fang, S. (2026, March 26–28). *Temporal processing in L1 and L2 Chinese: A visual world eye-tracking study*. Poster presented at the 39th Annual Conference on Human Sentence Processing (HSP), MIT, United States.
- 11 **Hu, J.**, & Olson, D. J. (2026, March 21–24). *L2 proficiency and switch costs in bilingual sentence processing: Evidence from eye-tracking data*. Talk presented at the 2026 American Association for Applied Linguistics (AAAL) Conference, Chicago, Illinois, United States.
- 10 Fang, S., **Hu, J.**, & Francis, E. J. (2026, Jan 8–11). *Eye-tracking evidence on L2 scope interpretation: an approximate replication*. Talk presented at the 2026 Linguistic Society of America (LSA) Annual Meeting, New Orleans, United States.
- 9 **Hu, J.**, Francis, E. J., & Fang, S. (2025, Nov 6–9). *Integrative and predictive mechanisms in L2 processing of temporal information: Evidence from web-based visual world eye-tracking*. Poster presented at the 50th annual Boston University Conference on Language Development (BUCLD), Boston University, United States.
- 8 **Hu, J.**, Francis, E. J., & Fang, S. (2025, May 22–23). *Online processing of temporal information in Mandarin Chinese L2 learners: The role of individual differences*. Poster presented at the Language Learning roundtable (CogNeuroIDALL), University of Illinois Chicago, United States.
- 7 **Hu, J.**, Cong, Y., & Francis, E. J. (2025, May 7). *Leveraging AI language models for automatic writing assessment in Chinese as a second language*. Poster presented at the Office of Interdisciplinary Graduate Programs (OIGP) Spring Reception, Purdue University, United States.
- 6 **Hu, J.**, & Cong, Y. (2025, May 3–4). *Modeling Chinese L2 writing development: The LLM-surprisal perspective*. Poster presented at the Annual Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics (NAACL), Albuquerque, New Mexico, United States.
- 5 **Hu, J.**, Francis, E. J., & Fang, S. (2025, April 13–14). *Integration and prediction in online processing of temporal information: A study of L1 and L2 Chinese*. Talk presented at the Purdue Linguistics Symposium (PLS), Purdue University, United States.
- 4 **Hu, J.** & Cong, Y. (2025, April 4–6). *Leveraging AI language models for Chinese L2 writing assessment*. Talk presented at International Forum on Linguistics and Chinese Education (IFOLCE) Program & the 32nd International Conference on Chinese Language Instruction, Princeton University, United States.

- 3 **Hu, J.** & Zhao, Y. (2023, March 3–4). *The acquisition of the Chinese perfective marker -le by native speakers of English: A feature reassembly approach*. Talk presented at the 15th Annual Meeting of the Illinois Language and Linguistics Society (ILLS), University of Illinois Urbana-Champaign, United States.
- 2 Han, X., Hu, W., Xiang, Y., Ren, Y., & **Hu, J.** (2022, May 14–15). *Whether the separable word is a word or a phrase: An investigation based on the translation recognition of native speakers*. Talk presented at the 23rd Chinese Lexical Semantics Workshop (CLSW 2022, Best Paper Award), Fuzhou, China.
- 1 **Hu, J.** (2021, June 5). *The research trends of second language acquisition (2000–2020): Bibliometric analysis*. Talk presented at the 14th Academic Forum on Teaching Chinese as a Foreign Language, Peking University, China.

Professional Experience

2022/8 - present **Graduate Researcher**, [Purdue Experimental Linguistics Lab](#)

- Conducted psycholinguistic research on bilingual sentence processing using visual world eye-tracking paradigm, investigating individual differences, event representation, and scope interpretation
- Analyzed large-scale eye-movement data using permutation cluster analysis and bootstrapped divergence point analysis
- Assisted in refining stimuli for another online self-paced listening experiment and managed participant recruitment, scheduling, and in-lab session coordination

2026/1 - 2026/5 **Graduate Research Assistant**, [Computational Linguistics @ Purdue Lab \(CL@P\)](#)

Project: Syntactic Ambiguity Resolution in Large Audio Language Models (LALMs)

- Designed and implemented an experiment on relative clause attachment to probe prosodic and semantic sensitivity in LALMs across multiple languages (English, Chinese, Arabic)
- Constructed prosodically controlled stimuli via text-to-speech synthesis and developed prompting strategies to probe model behavior, and conducted data analysis and prepared manuscript

2024/8 - 2024/12 **Graduate Research Assistant**, [Purdue Computation and Linguistic Meaning Lab](#)

Project: Assessment of Cognitive Status of Older Social Media Users with Natural Language Processing

- Developed scalable NLP pipelines to preprocess 6,000+ social media posts
- Applied unsupervised learning methods (K-Means clustering) and dimensionality reduction (t-SNE) to identify and filter irrelevant data
- Computed sentiment, lexical & syntactic complexity, part of speech, and text similarity metrics as linguistic biomarkers to detect probable cognitive impairment
- Built predictive models to classify latent patients with cognitive impairment with healthy individuals

Teaching & Mentoring

Linguistics Courses

Spring 2026 **Teaching Assistant**, School of Interdisciplinary Studies, Purdue University
LING 398 *Computational Techniques and Programming for Linguists* ([Course Website](#))

Fall 2025 **Instructor of Record**, School of Interdisciplinary Studies, Purdue University
LING 201 *Introduction to Linguistics*

Chinese Language and Culture Courses

2022 - 2025 **Instructor of Record**, School of Languages and Cultures, Purdue University

CHNS 301 *Chinese Level V* (Fall 2023)
CHNS 202 *Chinese Level IV* (Spring 2023, Spring 2024)
CHNS 201 *Chinese Level III* (Fall 2023)
CHNS 102 *Chinese Level II* (Spring 2025)
CHNS 102 DIS *Chinese Level II* (Summer 2023, Summer 2024)

2020 - 2021 **Teaching Assistant**, School of Chinese as a Second Language, Peking University
Contemporary Chinese Lecture Series (Summer 2020)
Advanced Chinese (Summer 2020)
Intermediate Chinese (Spring 2021)

Summer 2018 **Teaching Assistant**, University of International Business and Economics
Thinking Chinese: Nature and Culture in Early China

Mentorship

Spring 2026 **Mentor**, Purdue Margo Katherine Wilke Undergraduate Research Internship Program

- Undergraduate researchers (co-mentored with Yue Li & Elaine J. Francis):
Alejandro Sebastian Gonzalez, Amy Kathleen Genz, Erin Rhyse O'Donnell, Hannah Grace Barsoum, Samuel Isaiah Piper, Tara Wong
- Two projects presented at the Spring 2026 Undergraduate Research Conference (Literature, Linguistics, Languages, & Culture Colloquium) at Purdue University
 - *Effects of discourse-related factors on relative clause extraposition*
 - *The role of phrase length in relative clause extraposition*

Awards, Fellowships, & Grants

2026 **Bilsland Dissertation Fellowship**, Purdue College of Liberal Arts

2026 **Student Travel Award**, Annual Conference on Human Sentence Processing (\$400)

2025 **Paula Menyuk Award**, Boston University Conference on Language Development (\$400)

2024 **Outstanding Achievement Teaching Award**, Purdue University

2023,2024,2025 **The PROMISE grant**, Purdue College of Liberal Arts (\$1000)

2021 **The First Prize**, 29th Challenge Cup Wusi Youth Science Award Competition, Peking University

2019 **Hongcai Scholarship**, Peking University

2019 **Outstanding Graduate**, Beijing Higher Education Institutions

Community Service

2025 – present **Ad hoc Journal Reviewer**

- *The Gerontologist*
- *Chinese as a Second Language*

2023 – present **Conference Abstract Reviewer**

- Second Language Research Forum (SLRF2025, SLRF2026)
- Purdue Linguistics Symposium (PLS2023, PLS2024, PLS2025)

2026 **Program Committee**

- Workshop on Innovative Use of NLP for Building Educational Applications (BEA)

2025 **Grant Reviewer**, Purdue Graduate Student Government

2025 **Judge**, Purdue Undergraduate Research Conference

2023-2024 **Social Chair**, Purdue Linguistics Association

Skills

Programming R, Python, SQL, JavaScript

Statistical Tools SPSS, Stata, SAS (all used in coursework & projects)

Text & Speech AntConc (text analysis), CiteSpace (bibliometric analysis), Praat (acoustic analysis)

Experiments Gorilla (eye-tracking experiment), PCIBex (self-paced reading), Qualtrics (online survey)

Languages Mandarin(native), Southern Min (native), English (proficient)