SOO HYUN RYU

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EDUCATION

University of Michigan, Ann Arbor, MI   Aug 2020 -
Ph.D. in Psychology (Cognition and Cognitive Neuroscience)

University at Buffalo, Buffalo, NY   Aug 2017 - May 2019
M.S. in Computational Linguistics

Korea University, Republic of Korea   Mar 2017 - Jun 2017
Earned 9 graduate course credits in Psychology

Yonsei University, Republic of Korea   Mar 2010 - Feb 2017
B.A. in Psychology & French Langauge and Literature

TEACHING

Graduate Student Instructor
PSYCH 240 Introduction to Cognitive Psychology   21W, 21F, 22W
COGSCI 200 Introduction to Cognitive Science   22F

EXPERIENCE

Deloitte   Jun 2022 - Aug 2022
Machine Learning & NLP Intern   *Data Science Team*

Lionbridge   Aug 2019 - Aug 2020
Korean Grammar Developer   *Remote Freelancer*

NLP*CL Lab   Jun 2019 - Aug 2020
Visiting Researcher   *School of Computing, KAIST*

Natural Language Understanding Lab   May 2018 - Aug 2018
Research Intern   *Department of Biomedical Informatics, University at Buffalo*

Linguistic Psychology Lab   Jan 2016 - Aug 2017
Research Intern   *Department of Psychology, Korea University*

Human Development Lab   Mar 2015 - May 2015
Research Intern   *Department of Psychology, Yonsei University*

Asiana Airlines   Sep 2013 - Aug 2014
Intern   *Chicago O'Hare Airport*

TECHNICAL STRENGTHS

Computer Languages   Python, R, Java, Prolog, SQL, Unix shell script
Software & Tools   SPSS, Excel, LaTeX

HONORS AND AWARDS

Korean Government Study Abroad Scholarship   2017-2019

Semester Honors, Yonsei University   2012 Fall, 2015 Spring

PUBLICATIONS

Ryu, S. H., Yang, W. and Park, J. 2022. Flexible Acceptance Condition of Generics from a Probabilistic Viewpoint: Towards Formalization of the Semantics of Generics. *Journal of Psycholinguistic Research*

Song, H.* Ryu, S. H.*, Lee, H. and Park, J. 2021. A Large-scale Comprehensive Abusiveness Detection Dataset with Multifaceted Labels from Reddit. In Proceedings of the 25th Conference on Computational Natural Language Learning (CoNLL), pp. 552-561.   *two authors made equal contribution*

Ryu, S. H., and Lewis, R. L. 2021. Accounting for Agreement Phenomena in Sentence Comprehension with Transformer Language Models: Effects of Similarity-based Interference on Surprisal and Attention. In Proceedings of the Workshop on Cognitive Modeling and Computational Linguistics (CMCL), pp 61-71. **Best Student Paper Award**

Ryu, S. H., and Chaves, R. P. 2019. On the Interaction Between Dependency Frequency and Semantic Fit in Sentence Processing. Proceedings of the Society for Computation in Linguistics (SCiL), pp 330-333.

PRESENTATIONS

Ryu, S. H. and Lewis, R. L. "Transformer Language Models can Integrate Surprisal, Entropy, and Working Memory Retrieval Accounts of Sentence Processing," Invited talk at MIT Language and Computation Discussion Group, Apr 6th, 2022.

Ryu, S. H. and Lewis, R. L. "Using Transformer Language model to Integrate Surprisal, Entropy, and Working Memory Retrieval Accounts of Sentence Processing," Plenary talk in the Human Sentence Processing Conference, Mar 25th, 2022.

Ryu, S. H. and Lewis, R. L. "Transformers as integrative psycholinguistic models that combine expectation-based and memory-based accounts," Invited talk in Cognitive Science Seminar at the University of Michigan, Oct 11th, 2021.

Ryu, S. H. and Lewis, R. L. "Accounting for Agreement Phenomena in Sentence Comprehension with Transformer Language Models: Effects of Similarity-based Interference on Surprisal and Attention," Oral presentation in the Workshop on Cognitive Modeling and Computational Linguistics, Jun 10th, 2021.

Ryu, S. H., Brickman, A., Hu, J., Jin, R. M., Lee, R., LeHouillier, F. and Elkin, P. L. "Investigation of indeterminacy of temporal information in clinical narratives based on linguistic features of event and time expressions," Poster presentation in the AMIA Informatics Summit, Mar 26th, 2019.

Ryu, S. H. and Chaves, R. P. "On the Interaction Between Dependency Frequency and Semantic Fit in Sentence Processing", Oral presentation in the 2nd Annual Meeting of the Society for Computation in Linguistics, Jan 4th, 2019.

Kim, S., Ryu, S. H. and Nam, K. "A visual half-field study for meaning process of Korean ambiguous eojeol," Oral presentation in the 15th Annual Meeting of the Japanese Society for Cognitive Psychology, Jun 4th, 2017.