

# NAJOUNG KIM

---

n.kim@jhu.edu / najoungkim.github.io  
237 Krieger Hall, Johns Hopkins University  
3400 N Charles Street, Baltimore, MD, USA 21218

Updated January 2021

EDUCATION	<b>Johns Hopkins University</b> Ph.D. student, Cognitive Science Advisors: Paul Smolensky and Kyle Rawlins	2021 (expected)
	<b>Johns Hopkins University</b> M.A. Cognitive Science	2017
	<b>University of Oxford</b> M.St. General Linguistics & Comparative Philology	2015 Distinction
	<b>Seoul National University</b> B.A. English Linguistics & Literature B.A. Linguistics (double major) Minor: Computer Science & Engineering	2013 Summa Cum Laude
EXPERIENCE	<b>Student researcher, Google AI</b> <b>Research intern, Google AI</b> <i>PIs: Deepak Ramachandran, Ellie Pavlick</i> Improving Question-Answering systems with presupposition verification	Aug–Nov 2020 May–Aug 2020
	<b>Research intern, IBM Research AI</b> <i>PIs: Song Feng, Chulaka Gunasekara</i> Evaluating sentence representations for discourse	May–Aug 2019
	<b>Graduate student researcher, Jelinek Memorial Summer Workshop (JSALT)</b> <i>PIs: Sam Bowman, Ellie Pavlick</i> General-purpose Sentence Representation Learning team	Jun–Aug 2018
	<b>Visiting researcher, Korea Advanced Institute of Science and Technology (KAIST)</b> <i>PI: Jong C. Park</i> Computational modeling of semantic fluency	2015–2016
	<b>Intern developer, NAVER Corporation</b> Knowledge Extraction Team	2013–2014
	<b>NSF Doctoral Dissertation Research Improvement Grant</b> Title: <i>Compositional Linguistic Generalization in Human and Machine Learning</i> PI: Paul Smolensky, Co-PIs: Najoung Kim, Geraldine Legendre, Tal Linzen BCS-2041221 (\$12,771)	2021
AWARDS	<b>Travel Grant to attend EMNLP 2020</b> Graduate Representative Organization at Johns Hopkins University	2020

<b>NeurIPS 2019 Travel Award</b>	2019
<b>Best Paper Award, *SEM 2019</b>	2019
<b>Owen Scholarship</b> Awarded to select incoming doctoral students in natural sciences (\$18,000)	2016–2019
<b>Mica and Ahmet Ertegun Graduate Scholarship Programme in the Humanities</b> Full scholarship for Master’s degree at University of Oxford (~\$42,000)	2014–2015
<b>Department Assistant</b> Merit-based scholarship position at Seoul National University (SNU)	2013–2014
<b>SNU Undergraduate Research Program</b> Grant for select undergraduate research proposals (~\$3000)	2013
<b>SNU Foundation Funds Scholarship</b> <b>SNU Superior Academic Performance Scholarship</b>	2013 2010–2011

#### PEER-REVIEWED ARTICLES

**Najoung Kim** and Tal Linzen. COGS: A Compositional Generalization Challenge Based on Semantic Interpretation (2020). *Empirical Methods in Natural Language Processing (EMNLP)*. [paper] [talk]

**Najoung Kim**, Song Feng, Chulaka Gunasekara, and Luis A. Lastras. Implicit Discourse Relation Classification: We Need to Talk About Evaluation (2020). *Annual Conference of the Association for Computational Linguistics (ACL)*. (17.6% acceptance rate) [paper]

**Najoung Kim** and Tal Linzen. Compositionality as directional consistency in sequential neural networks (2019). *Context and Compositionality in Biological and Artificial Neural Systems Workshop, NeurIPS*. [paper]

**Najoung Kim**, Roma Patel, Adam Poliak, Alex Wang, Patrick Xia, Tom McCoy, Ian Tenney, Alexis Ross, Tal Linzen, and Benjamin Van Durme, Samuel R. Bowman, and Ellie Pavlick (2019). Probing what different NLP tasks teach machines about function word comprehension. *Proceedings of the Eighth Joint Conference on Lexical and Computational Semantics (\*SEM)*. [paper] **Best Paper Award**

Alex Wang, Jan Hula, Patrick Xia, Raghavendra Pappagari, R. Thomas McCoy, Roma Patel, **Najoung Kim**, Ian Tenney, Yinghui Huang, Katherin Yu, Shuning Jin, Berlin Chen, Benjamin Van Durme, Edouard Grave, Ellie Pavlick, and Samuel R. Bowman (2019). How to Get Past Sesame Street: Sentence-Level Pretraining Beyond Language Modeling. *Proceedings of the Annual Conference of the Association for Computational Linguistics (ACL)*. [paper]

**Najoung Kim**, Jung-Ho Kim, Maria K. Wolters, Sarah E. MacPherson, and Jong C. Park (2019). Automatic Scoring of Semantic Fluency. *Frontiers in Psychology*. [paper]

**Najoung Kim**, Kyle Rawlins, Benjamin Van Durme, and Paul Smolensky (2019). Predicting the Argumenthood of English Prepositional Phrases. *Proceedings of the 33rd AAAI Conference on Artificial Intelligence (AAAI)*. [paper] (16.2% acceptance rate, oral presentation)

Ian Tenney, Patrick Xia, Berlin Chen, Alex Wang, Adam Poliak, R Thomas McCoy, **Najoung Kim**, Benjamin Van Durme, Samuel R. Bowman, Dipanjan Das, and Ellie Pavlick (2019). What do you learn from context? Probing for sentence structure in contextualized word representations. *International Conference on Learning Representations (ICLR)*. [paper]

Maria K. Wolters, **Najoung Kim**, Jung-Ho Kim, Sarah E. MacPherson, and Jong C. Park (2016). Prosodic and Linguistic Analysis of Semantic Fluency Data: A Window into Speech Production and Cognition. *Interspeech*. [doi] [paper]

Jung-Ho Kim, **Najoung Kim**, Hancheol Park, and Jong C. Park (2016). Enhanced Sign Language Transcription System via Hand Tracking and Pose Estimation. *Journal of Computing Science and Engineering* vol 10.3.

**Najoung Kim** and Jong C. Park (2016). A Morphological Approach to the Longitudinal Detection of Dementia. *Proceedings of HCI Korea 2016, The HCI Society of Korea*. [paper]

#### WORK IN PROGRESS

**Najoung Kim**, Ellie Pavlick, Burcu Karagol Ayan, and Deepak Ramachandran. Which Linguist Invented the Lightbulb? Presupposition Verification for Question-Answering. [preprint] (in submission)

**Najoung Kim**, Kyle Rawlins, and Paul Smolensky. The complement-adjunct distinction as gradient blends: the case of English prepositional phrases. (under revision)

#### WORK PEER-REVIEWED BY ABSTRACT

**Najoung Kim** and Paul Smolensky (2021). Testing for Grammatical Category Abstraction in Neural Language Models. To appear at *The Society for Computation in Linguistics (SCiL)*.

Sadhwi Srinivas, **Najoung Kim**, and Kyle Rawlins (2020). Maximize Presupposition! and the Korean demonstrative *ku*. Presented at *The 94th Annual Meeting of the Linguistic Society of America (LSA)*. [abstract] [poster]

**Najoung Kim**, Benjamin Van Durme, Ellie Pavlick, and Paul Smolensky (2018). Linguistically informed tasks for evaluating structure encoded by sentence representations. *WeCNLP Summit*, Facebook HQ, Menlo Park, CA. [poster] [slides]

**Najoung Kim**, Kyle Rawlins, and Paul Smolensky (2018). A gradient blend analysis of English PP verbal dependents. *Conference on Interdisciplinary Approaches to Linguistic Theory (CiALT) 2*, Humboldt-Universität zu Berlin. [abstract]

**Najoung Kim**, Kyle Rawlins, and Paul Smolensky (2018). A gradient blend analysis of English PP verbal dependents. *Acceptability judgments in current linguistic theory*, Universitat Autònoma de Barcelona. [slides]

#### INVITED TALKS / TUTORIALS

**Najoung Kim**. What Aspects of Meaning are Missing from Current Natural Language Understanding Systems?

- Invited talk at the University of Texas at Austin, Feb 2021.
- Invited talk at Allen Institute for AI, Jan 2021.
- Invited talk at Toyota Technological Institute at Chicago, Jan 2021.

**Najoung Kim** and Tal Linzen. COGS: A Compositional Generalization Challenge Based on Semantic Interpretation.

- Invited talk at NERT lab, Georgetown University, Nov 2020.
- Invited poster presentation at the Microsoft Research AI Breakthroughs Workshop, Sep 2020.

**Najoung Kim**, Roma Patel, Adam Poliak, Alex Wang, Patrick Xia, Tom McCoy, Ian Tenney, Alexis Ross, Tal Linzen, Benjamin Van Durme, Samuel R. Bowman, and Ellie Pavlick. Probing what different NLP tasks teach machines about function word comprehension and where to go next. Invited talk at JHU CLSP Seminar, Oct 2019.

**Najoung Kim**, Kyle Rawlins, and Paul Smolensky, The complement-adjunct distinction as gradient blends: the case of English prepositional phrases. Invited talk at the Gradient Symbolic Computation Workshop, Baltimore, Sep 2019.

**Najoung Kim**, Diego Marcheggiani, Michael Roth, and Benjamin Van Durme, Semantic Role Labeling Tutorial, EMNLP, Copenhagen, Sep 2017.

**Najoung Kim**, Jung-Ho Kim, Maria K. Wolters, Sarah E. MacPherson, and Jong C. Park. Approximating the Semantic Structures behind Category Fluency Sequences (Poster). MACSIM 6 at CUNY, New York, Oct 2016. [abstract]

**Najoung Kim**. Detection and Categorisation of Neograms in Korean Text (+a). Invited talk at Ertegun House, Oxford, 2015.

**PROFESSIONAL SERVICE** Reviewer: ACL-IJCNLP 2021 (TBD), ACL 2020, EMNLP 2020 (acknowledged as outstanding reviewer), \*SEM 2019, EMNLP-IJCNLP 2019, EMNLP 2018  
Program Committee: EACL Student Research Workshop 2021, ACL Student Research Workshop, 2019-2021

**PROFESSIONAL MEMBERSHIP** Association for Computational Linguistics  
Cognitive Science Society  
Linguistic Society of America

**TEACHING** Fall 2019, Introduction to Computational Cognitive Science (TA/Co-Instructor)  
Spring 2019, Foundations of Neural Networks (TA/Lab Instructor)  
Spring 2018, Foundations of Cognitive Science (TA)  
Fall 2017, Semantics I (TA/Lab Instructor)  
Spring 2017, Language and Advertising (TA)  
Winter 2014, Samsung Convergence Software Course, SNU (Instructor)

**COMPUTER SKILLS** Python, R, HTML (proficient)  
Java, C, Scheme/Racket, OCaml (basic)  
Tools: PyTorch, PCIBex, Mechanical Turk

**LANGUAGES** Korean (native); English (near-native); Spanish (intermediate, DELE Intermedio); Japanese (reading knowledge, JLPT N1)

**COMMUNITY SERVICE** **Diversity & Representation Committee** current  
**Colloquium Student Committee** 2018–current  
*Department of Cognitive Science, Johns Hopkins University*

<b>Panelist</b> , BrainIAC Professional Development Event	9/21/2020
<b>Mentor, Samsung Convergence Software Course</b> <i>Department of Computer Science, Seoul National University</i>	2014
<b>Peer tutor, English (volunteer work)</b> <i>Seoul National University</i>	2011
<b>English tutor (volunteer work)</b> <i>Younghak High School</i>	2010