NAJOUNG KIM

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EDUCATION

Johns Hopkins University	2016–current

Ph.D. student, Cognitive Science
Advisors: Paul Smolensky and Kyle Rawlins

Johns Hopkins University	2016–2017

M.A. Cognitive Science

University of Oxford	2014–2015
	Distinction

M.St., General Linguistics & Comparative Philology
Concentration & Thesis focus: Computational Linguistics

Seoul National University	2009–2013
	Summa Cum Laude

B.A. English Linguistics & Literature
B.A. Linguistics (double major)
Minor: Computer Science & Engineering

EXPERIENCES

Research intern, IBM Research	Summer 2019

Thomas J. Watson Research Center, Yorktown Heights, NY

Graduate student researcher	Jun-Aug 2018

The Fifth Frederick Jelinek Memorial Summer Workshop (JSALT)
- General-purpose Sentence Representation Learning team
  (PIs: Sam Bowman, Ellie Pavlick)
- Designed linguistically-informed probing tasks for interpretability of sentence representations learned by neural networks

Visiting researcher	2015-2016

*NLP*CL Lab, School of Computing, Korea Advanced Institute of Science and Technology*
- Computational semantics
- Modeled diachronic changes in productive language use to aid early diagnosis of mild cognitive impairment
- Developed methods for detecting fluid category boundaries for improved performance measures in Category Fluency Tasks

Intern developer	2013-2014

Knowledge Extraction Team (Former NLP Team), NAVER Corporation, South Korea

WORKS IN PROGRESS

Najoung Kim, Jung-Ho Kim, Maria K. Wolters, Sarah E. MacPherson, and Jong C. Park. "Automatic Scoring of Semantic Fluency." [abstract] (journal article under review)

Najoung Kim, Kyle Rawlins, and Paul Smolensky. "Motivating gradient symbolic blends—case of English prepositional phrases." (journal article in preparation)

PUBLICATIONS   **Najoung Kim**, Roma Patel, Adam Poliak, Alex Wang, Patrick Xia, Tom McCoy, Ian Tenney, Alexis Ross, Tal Linzen, Benjamin Van Durme, Sam Bowman, and Ellie Pavlick. "Probing what different NLP tasks teach machines about function word comprehension." To appear in the *Proceedings of the Eighth Joint Conference on Lexical and Computational Semantics (*SEM)*, 2019. [pdf]

Najoung Kim, Kyle Rawlins, Benjamin Van Durme, and Paul Smolensky. "Predicting the Argumenthood of English Prepositional Phrases." To appear in the *Proceedings of the 33rd AAAI Conference on Artificial Intelligence (AAAI)*, 2019. [arXiv]

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

Sam Bowman, Ellie Pavlick, Edouard Grave, Benjamin Van Durme, Alex Wang, Jan Hula, Patrick Xia, Raghu Pappagari, Tom McCoy, Roma Patel, **Najoung Kim**, Ian Tenney, Katherin Yu, Shuning Jin, and Berlin Chen. "Looking for ELMo's friends: Sentence-Level Pretraining Beyond Language Modeling." arXiv:1812.10860. 2018. [pdf]

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

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

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

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

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

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

TALKS / TUTORIALS   Semantic Role Labeling Tutorial (**Najoung Kim**, Diego Marcheggiani, Michael Roth, and Benjamin Van Durme), 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]

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

"Corpus Tools: Past, Present, and Future,", Talk & Event Organiser (Guest speaker: Laurence Anthony), Ertegun House, Oxford, 2015.

AWARDS	**Owen Scholarship**	2016-2019

Awarded to select incoming doctoral students in the natural sciences,
Johns Hopkins University

**Mica and Ahmet Ertegun Graduate Scholarship Programme
in the Humanities** 2014-2015
Full scholarship for Master's degree (University of Oxford)

Department Assistant 2013-2014
Scholarship position (Department of English Lit. & Ling. at SNU)

SNU Undergraduate Research Program 2013
Grant for selected undergraduate research proposals
- Conducted an independent research project on productivity quantification
- Research grant ($3000)

Foundation Funds Scholarship 2013
SNU Superior Academic Performance Scholarship 2010-2011
Awarded for academic performance

PROFESSIONAL SERVICE

Reviewer: *SEM 2019, ACL 2019, EMNLP 2018

PROFESSIONAL MEMBERSHIP

Linguistic Society of America
Association for Computational Linguistics
Association for the Advancement of Artificial Intelligence

TEACHING

Spring 2019, TA for Foundations of Neural Networks (with Paul Smolensky)
- Designed PyTorch assignments
- Led weekly review sessions and provided feedback on weekly assignments

Spring 2018, TA for Foundations of Cognitive Science (with Paul Smolensky)
- Led class discussions for graduate and undergraduate sections
- Provided feedback on weekly assignments

Fall 2017, TA for Semantics I (with Kyle Rawlins)
- Led weekly review sessions

Spring 2017, TA for Language and Advertising (with Kyle Rawlins)

Winter 2014, Tutor for Samsung Convergence Software Course, SNU
- Led help sessions for CS undergraduates and double-major/minor students
- Guest lecture: 'Introduction to Python'

THESES "Automatic Detection and Classification of Neograms in Korean Text,"
MSt thesis, University of Oxford, 2015. (Advisors: Ash Asudeh, Stephen Pulman)

"A Research on Productivity Quantification Through Web-based Corpus Construction and Analysis on Korean Derivational Affixes,"
B.A. dissertation, Department of Linguistics, Seoul National University, 2013.
(Advisor: Jongho Jun; project funded by SNU Undergraduate Research Program)

"Verbal Structures of English Genitive Constructions Containing Deverbal Nouns,"
B.A. dissertation, Department of English Linguistics & Literature, Seoul National University, 2013. (Advisor: Heok-Seung Kwon)

COMPUTER SKILLS Python, R, HTML (proficient)
Java, C, Scheme/Racket, OCaml (basic)
PyTorch

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

VOLUNTEER WORK

Colloquium student committee   2018–
Department of Cognitive Science, Johns Hopkins University

Peer tutor   2011
Seoul National University
- Taught 1st and 2nd year students English

English tutor   2010
Youngnak High School
- Taught high school students English grammar