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 M.St., General Linguistics & Comparative Philology Distinction

Concentration & Thesis focus: Computational Linguistics

Seoul National University2009–2013

B.A. English Linguistics & Literature

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

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

Jun-Aug 2018

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

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

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." In Proceedings of the 33rd AAAI Conference on Artificial Intelligence (AAAI), 2019. [pdf]

Ian Tenney, Patrick Xia, Berlin Chen, Alex Wang, Adam Poliak, R Thomas Mc-Coy, 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." 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

Najoung Kim, Benjamin Van Durme, Ellie Pavlick and Paul Smolensky. "Linguisti-PRESENTATIONS cally 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 at 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 SNU Superior Academic Performance Scholarship

2013

2010-2011

Awarded for academic performance

PROFESSIONAL

SERVICE

Reviewer: *SEM 2019, EMNLP 2018, 2019

Program Committee: ACL 2019 Student Research Workshop

PROFESSIONAL MEMBERSHIP

Association for Computational Linguistics

Association for the Advancement of Artificial Intelligence

TEACHING

Spring 2019, TA for Foundations of Neural Networks (with Paul Smolensky)

- Developed 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 -

2010

Department of Cognitive Science, Johns Hopkins University

Peer tutor 2011

Seoul National University

• Taught 1st and 2nd year students English

English tutor

Youngnak High School

• Taught high school students English grammar