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 Concentration & Thesis focus: Computational Linguistics Distinction

Seoul National University

B.A. English Linguistics & Literature

2009–2013 Summa Cum Laude

B.A. Linguistics (double major)

Minor: Computer Science & Engineering

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, "Blended trees for a unified semantic analysis for prepositional phrases." (abstract 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, 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]

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." 2018. [arXiv]

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." To appear in *International Conference on Learning Representations* (ICLR). 2019. [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]

OTHER 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.

EXPERIENCES

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
- Modeling diachronic changes in productive language use to aid early diagnosis of mild cognitive impairment
- Dynamic clustering with fluid category boundaries for improved performance measures in Category Fluency Tasks
- Corpus annotation for gene-depression relations

Intern developer

2013-2014

Knowledge Extraction Team (Former NLP Team), NAVER Corporation

- Developed an article suggestion algorithm for search autocomplete
- Worked on question/keyword detection

- Worked on identifying domained queries and query patterns that require specific answers
- Translated and summarized AI-related papers

Trainee developer

2013

NHN Software Membership

- Received professional education in software development
- Led a group project developing a functioning web-based service
- Awarded for overall performance

AWARDS

Owen Scholarship

2016-2019

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

TEACHING

Spring 2018, TA for Foundations of Cognitive Science (with Paul Smolensky)

- Led class discussion 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)

PROFESSIONAL

Linguistic Society of America

MEMBERSHIP Association for Computational Linguistics

Association for the Advancement of Artificial Intelligence

PROFESSIONAL SERVICE

Reviewer for EMNLP 2018

VOLUNTEER

Colloquium student committee

2018-

2011

WORK

Department of Cognitive Science, Johns Hopkins University

Peer tutor

Seoul National University

• Taught 1st and 2nd year students English

English tutor 2010

Youngnak High School

• Taught high school students English grammar