MIYOUNG KO

5th. year Ph.D. Student in Graduate School of Al Language and Knowledge Lab, KAIST https://miyoungko.github.io

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RESEARCH INTERESTS

Question Answering. Information Retrieval. Knowledge-augmented Generation. Interpretability / Analysis of LLMs

EDUCATION

Korea University, College of Science / College of Informatics | Seoul, South Korea

Mar 2014 - Aug 2018

B.S., Department of Chemistry GPA: 4.23 / 4.50

B.S. (Double Major), Department of Computer Science and Engineering

Advisor: Prof. Jongseung Kim

Korea University, College of Informatics | Seoul, South Korea

Sep 2018 - Aug 2020

M.S. Department of Computer Science and Engineering GPA: 4.50 / 4.50

Advisor: Prof. Jaewoo Kang

Korea Advanced Institute of Science and Technology (KAIST) | Seoul, Soouth Korea

Mar 2021 - Aug 2025 (EXPECTED)

Ph.D. Student, Graduate School of Al GAP: 4.15 / 4.30

Advisor: Minjoon Seo

EXPERIENCE

Amazon Science, Santa Clara, United States | Applied Scientist intern

Sep 2024 - Jan 2025

Worked in the GraphRAG team, focusing on improving Retrieval-Augmented Generation (RAG) for temporal question answering.

NAVER Copr., Seongnam, South Korea | Research Intern

Sep 2020 - Feb 2021

Worked in Clova AI, focusing on developing unsupervised intent classification system by domain adaptation

PUBLICATIONS

The BiGGen Bench: A Principled Benchmark for Fine-grained Evaluation of Language Models with Language Models [pdf] [dataset]

NAACL 2025 (Full)

Seungone Kim, Juyoung Suk, Ji Yong Cho, Shayne Longpre, Chaeeun Kim, Dongkeun Yoon, Guijin Son, Yejin Cho, Sheikh Shafayat, Jinheon Baek, Sue Hyun Park, Hyeonbin Hwang, Jinkyung Jo, Hyowon Cho, Haebin Shin, Seongyun Lee, Hanseok Oh, Noah Lee, Namgyu Ho, Se June Joo, **Miyoung Ko**, Yoonjoo Lee, Hyungjoo Chae, Jamin Shin, Joel Jang, Seonghyeon Ye, Bill Yuchen

Lin, Sean Welleck, Graham Neubig, Moontae Lee, Kyungjae Lee, Minjoon Seo

Investigating How Large Language Models Leverage Internal Knowledge to Perform EMNLP 2024 (Full) Complex Reasoning [pdf] [dataset] [code]

Miyoung Ko*, Sue Hyun Park*, Joonsuk Park, Minjoon Seo

KTRL+F: Knowledge-Augmented In-Document Search [pd]	F1 F.	code ⁱ	i
KINLTE, KIIOWIEUKE-AUKIIIEIILEU III-DOCUIIIEIIL SEAICII IDUI	4 I I'	coue	

Hanseok Oh, Haebin Shin, **Miyoung Ko**, Hyunji Lee, Minjoon Seo

ClaimDiff: Comparing and Contrasting Claims on Contentious Topics [pdf] [dataset]

Miyoung Ko, Ingyu Seong, Hwaran Lee, Joonsuk Park, Minsuk Chang, Minjoon Seo

EMNLP 2020 (Full)

NAACL 2024

2023

Findings of ACL

EMNLP 2020

NLP-COVID Workshop

Look at the First Sentence: Position Bias in Question Answering [pdf] [code]

Miyoung Ko, Jinhyuk Lee, Hyunjae Kim, Gangwoo Kim, Jaewoo Kang

Answering Questions on COVID-19 in Real-Time [pdf]

Jinhyuk Lee, Sean S. Yi, Minbyul Jeong, Mujeen Sung, Wonjin Yoon, Yonghwa Choi,

Miyoung Ko, Jaewoo Kang

SAIN: Self-Attentive Integration Network for Recommendation [pdf]
Seongjun Yun, Raehyun Kim, Miyoung Ko, Jaewoo Kang

SIGIR 2019 (Short)

Bioinformatics 2019

ReSimNet: Drug Response Similarity Prediction based on Siamese Neural Network [pdf]

Minji Jeon*, Donghyeon Park*, Jinhyuk Lee, Hwisang Jeon, **Miyoung Ko**, Sunkyu Kim, Yonghwa Choi,

Aik-Choon Tan, Jaewoo Kang

Ranking Paragraphs for Improving Answer Recall in Open-Domain Question Answering [pdf] EMNLP 2018 (Short)

Jinhyuk Lee, Seongjun Yun, Hyunjae Kim, Miyoung Ko, Jaewoo Kang

Name Nationality Classification with Recurrent Neural Networks [pdf]

Jinhyuk Lee, Hyunjae Kim, Miyoung Ko, Donghee Choi, Jaehoon Choi, Jaewoo Kang

IJCAI 2017 (Full)

CHALLENGES & PROJECTS

Kaggle COVID-19 Open Research Dataset Challenge (CORD-19)

Open covidAsk (real-time QA systems): https://covidask.korea.ac.kr\

- Evaluating guideline and additional QA data

Multi-Targeting Drug DREAM Challenge

- Build model utilizing molecular graph input

Advisor: Minjoon Seo

Nov 2018

Apr 2020

INVITED TALK

Position Bias in Question Answering | NAVER

Feb 2021

TEACHING

Bias and Ethics in Natural Language Processing (KAIST AI620)

(1599)

Spring 2023

Special Topics in Machine Learning <AI for LAW> (KAIST AI599)

Fall 2022

Deep Learning for NLP (KAIST AI605)

Spring 2021, Fall, 2021, Spring 2022, Fall 2023

HONORS

SBS Foundation Scholarship

Sep 2019 – Aug 2020

Semester High Honors National Science and Engineering Scholarship Fall 2014, Spring 2015, Fall 2015, Spring 2016, Spring 2017

Samsung Welfare Foundation Scholarship

Mar 2016 – Aug 2018

Honors Scholarship, Korea University

Mar 2016 Sep 2014, Mar 2015

Science Prodigy Scholarship, Korea University

Mar 2014