Kyungjae Lee

Research Scientist, Advanced Machine Learning Lab, LG AI Research

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Interest	• Large Language Model, Retrieval-augmented LMs, Scientific Reasoning

Education
- Yonsei University, Seoul, Republic of Korea ~ Feb 2022
  Ph.D. Student, Adviser: Seung-won Hwang (GPA: 4.21 / 4.30),
- Yonsei University, Seoul, Republic of Korea ~ Feb 2016
  B.S., Electrical and Electronic Engineering (Major GPA: 4.05 / 4.30)

Employment
- Research Scientist, LG AI Research   Dec 2021 ~ Current
- Lecturer, Yonsei University (CS4108)   Spring 2020
- Research Intern, Microsoft Research Asia   Sep 2018 ~ Mar 2019

Publications

- **PreWoMe: Exploiting Presuppositions as Working Memory for Long Form Question Answering**
  Wookje Han, Jinsol Park, **Kyungjae Lee** (corresponding author)
  In EMNLP 2023.

- **On Monotonic Aggregation for Open-domain QA**
  Sang-eun Han, Yeonseok Jeong, Seung-won Hwang, **Kyungjae Lee**
  In Interspeech 2023.

- **QASA: Advanced Question Answering on Scientific Articles**
  (Yoonjoo Lee*, **Kyungjae Lee***), Sunghyun Park, Dasol Hwang, Jaehyeon Kim, Hong-in Lee, Moontae Lee (*co-first authors)
  In ICML 2023.

- **Exploring the Benefits of Training Expert Language Models over Instruction Tuning**
  Joel Jang, Seungone Kim, Seonghyeon Ye, Doyoung Kim, Lajanugen Logeswaran, Moontae Lee, **Kyungjae Lee**, Minjoon Seo.
  In ICML 2023.

- **When to Read Documents or QA History: On Unified and Selective Open-domain QA**
  (Kyungjae Lee*, Sang-eun Han*), Seung-won Hwang, Moontae Lee (*co-first authors).
  In ACL findings 2023.

- **On Complementarity Objectives for Hybrid Retrieval**
  Dohyeon Lee, Seung-won Hwang, **Kyungjae Lee**, Seungtaek Choi, Sunghyun Park.
  In ACL 2023.

- **Plug-and-Play Adaptation for Continuously-updated QA**
<u>Kyungjae Lee,</u> Wookje Han, Seung-won Hwang, Hwaran Lee, Joonsuk Park, Sang-Woo Lee.
In *ACL findings 2022*.

- **Robustifying Multi-hop QA through Pseudo-Evidentiality Training**
<u>Kyungjae Lee,</u> Seung-won Hwang, Sang-eun Han, and Dohyeon Lee.
In *ACL 2021*.

- **Query Generation for Multimodal Documents**
Kyungho Kim, <u>Kyungjae Lee,</u> Seung-won Hwang, Young-In Song and Seungwook Lee.
In *EACL 2021*.

- **Instructional Video Summarization using Attentive Knowledge Grounding**
(Kyungho Kim*, <u>Kyungjae Lee</u>*)**,** and Seung-won Hwang.
In *ECML-PKDD 2020* (*co-first authors, demo track)

- **Segment-then-Rank: Non-factoid Question Answering on Instructional Videos**
<u>Kyungjae Lee</u>, Nan Duan, Lei Ji, Jason Li, and Seung-won Hwang.
In *AAAI 2020*, New York.

- **Learning with Limited Data for Multilingual Reading Comprehension**
(<u>Kyungjae Lee</u>*, Syunhyun Park*), Hojae Han, Jinyoung Yeo, Seung-won Hwang, Juho Lee.
In *EMNLP 2019* (*co-first authors, oral presentation), Hong Kong.

- **Categorical Metadata Representation for Customized Text Classification**
Jihyeok Kim*, Reinald Kim Amplayo*, <u>Kyungjae Lee</u>, Sua Sung, Minji Seo, Seung-won Hwang.
In *TACL 2019* (*co-first authors, ACL 2019 talk).

- **Semi-supervised Training Data Generation for Multilingual Question Answering**
<u>Kyungjae Lee</u>, Kyoungho Yoon, Sunghyun Park, Seung-won Hwang.
In *LREC 2018*, Japan.

- **Translations as Additional Contexts for Sentence Classification**
Reinald Kim Amplayo, <u>Kyungjae Lee</u>, Jinyoung Yeo, and Seung-won Hwang.
In *IJCAI 2018*, Stockholm.

- **Gradable Adjective Embedding for Commonsense Knowledge**
<u>Kyungjae Lee</u>, Hyunsouk Cho, and Seung-won Hwang.
In *PAKDD 2017*.

Teaching & Project Experiences	• **Lecturer**: Yonsei University, Artificial Intelligence (CS4108) (Spring 2020), LG CNS / SKT, Natural Language Processing (2018)
	• **Internship**: Microsoft Research Asia (Sep 2018~Mar 2019, "Skip the boring intro" project, Non-factoid video QA, accepted at AAAI 2020)
	• **Project**: Student's Semantic Trajectory Representation & Characterization (supported by Microsoft Research, 2016)

Honors & Awards	• NAVER Ph.D. Fellowship Award 2019
	• Google Travel Grant for EMNLP 2019
	• Global Ph.D. Fellowship by National Research Foundation of Korea (Tuition and Stipend for 5 years, 2017 ~ Present)
	• BIG 2017 CUP (sponsored by Microsoft) Data competition, 3rd winner
	• Undergraduate Yonsei Scholarship (Full Tuition for 4 years)
	• Undergraduate, 2012-13 semester GPA honors
Professional Services	• Reviewer: ACL (2020~), EMNLP (2021~), NAACL (2021), VLDB (2019, 2020)
References	Seung-won Hwang, Ph.D.
	• Professor, Department of Computer Science and Engineering, Seoul National University
	Nan Duan, Ph.D.
	• Principal Researcher Manager, Microsoft Research Asia, Beijing, China