Philhoon **Oh**

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Research Interest

My research interests primarily encompass Information Retrieval (IR) and Question Answering (QA). I aim to explore how language, whether in conversations, audio, or text, can be represented as question + external information = answer. My specific areas of focus include Open-Domain Question Answering, Fact Verification, and addressing the challenge of Hallucination or Confabulation in responses.

Education

Korea Advanced Institute of Science and Technology   *Seoul, S.Korea*

M.S. IN ARTIFICIAL INTELLIGENCE   *Mar. 2023 - Present*

Advisor: James Thorne

University of California, Berkeley   *Berkeley, CA USA*

B.A. IN STATISTICS   *Aug. 2012 - Aug. 2017*

Publications

Detrimental Contexts in Open-Domain Question Answering   *EMNLP Findings*

PHILHOON OH, AND JAMES THORNE   *Sep. 2023*

• In The 2023 Conference on Empirical Methods in Natural Language Processing, 2023

Knowledge Corpus Error in Question Answering   *EMNLP Findings*

YEJOON LEE, PHILHOON OH, AND JAMES THORNE   *Sep. 2023*

• In The 2023 Conference on Empirical Methods in Natural Language Processing, 2023

Work Experience

SK Inc. C&C   *Gyeonggi-do, S.Korea*

NLP ENGINEER & PL   *Jan. 2019 - Feb. 2022*

• Developed NLP framework based on Pytorch for various NLP models and subsequent tasks.
• Designed pipelines for NLP tasks including MRC, ODQA, Keyword Extraction.
• Implemented automated pipeline for Korean Text Crawling and Pre-processing.
• Led NLP Keyword Extraction project.

Anemone Boutique LLC   *Santa Monica, CA USA*

MARKETING ANALYST   *Oct. 2017 - Mar. 2018*

• Analyzed the impacts of different marketing strategies.
• Implemented time series analysis (SARIMA) on previous quarters data to predict future sales.

Projects

Korean ODQA Project   *Gyeonggi-do, S.Korea*

NLP ENGINEER   *Jul. 2021 - Dec. 2021*

• Developed a Korean ODQA (Open Domain Question Answering) feature.
• Achieved performance improvements on datasets, including Korquad v1, AI common sense, and the XX hospital dataset.

Chatbot PoC   *Gyeonggi-do, S.Korea*

NLP ENGINEER   *Jul. 2021 - Sep. 2021*

• Demonstrated the Open-Domain Question Answering (ODQA) feature to one of the largest hospitals in Korea, the client
• The ODQA feature was integrated as an NLP feature through a PoC.

Survey Project   *Gyeonggi-do, S.Korea*

NLP ENGINEER & PL   *Jul. 2021 - Aug. 2021*

• Developed a survey feedback tool for the SK SUPEX Council (Consultative Panel within SK Group).
• Implemented the Keyword Extractor module to collect feedback from anonymous ethical surveys.

NLP Framework   *Gyeonggi-do, S.Korea*

NLP ENGINEER   *Jan. 2021 - Jun. 2021*

- Participated in developing an integrated NLP framework based on PyTorch.
- Designed a new architecture to support various NLP models based on tasks and features.
- Developed unit tests for the framework using the pytest module.

Honors & Awards

2023	**2nd Place**, 2023 AI Graduate School Challenge	*Seoul, S.Korea*
2017	**Manga Cum Laude**, High Distinction in General Scholarship at graduation	*Berkeley, CA USA*