

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

M.S. IN ARTIFICIAL INTELLIGENCE

Advisor: James Thorne, Co-Advisor: Jinwoo Shin

Seoul, S.Korea

Mar. 2023 - Present

University of California, Berkeley

B.A. IN STATISTICS

Berkeley, CA USA

Aug. 2012 - Aug. 2017

Publications

CLiCK: A Benchmark Dataset of Cultural and Linguistic Intelligence in Korean

EUNSU KIM, JUYOUNG SUK, **PHILHOON OH**, HANEUL YOO, JAMES THORNE AND ALICE OH

- In the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation, 2024

LREC-COLING 2024

Feb. 2024

Detrimental Contexts in Open-Domain Question Answering

PHILHOON OH, AND JAMES THORNE

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

EMNLP Findings

Sep. 2023

Knowledge Corpus Error in Question Answering

YEJOON LEE, **PHILHOON OH**, AND JAMES THORNE

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

EMNLP Findings

Sep. 2023

Work Experience

NAVER Corp

RESEARCH INTERN

- Designed a pipeline to generate datasets to train Korean evaluation models.
- Refined the evaluation model, achieving a Pearson Correlation of 0.846, compared to the baseline of 0.698

Gyeonggi-do, S.Korea

Jan. 2024 - Feb. 2024

SK Inc. C&C

NLP ENGINEER & PL

- 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.

Gyeonggi-do, S.Korea

Jan. 2019 - Feb. 2022

Anemone Boutique LLC

MARKETING ANALYST

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

Santa Monica, CA USA

Oct. 2017 - Mar. 2018

Teaching Experience

ChatGPT Project

GRADUATE STUDENT ADVISOR

- Conducted research on how ChatGPT works with non-English languages advised by *James Thorne* and *Alice Oh*.
- Mentored undergraduate students at KAIST on ChatGPT and fundamental NLP research topics.
- Led and guided undergraduate students in a research project; paper accepted at LREC-COLING 2024.

Seoul, S.Korea

Feb. 2023 - Dec. 2023

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 SUPLEX 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 hosted by Korea Ministry of Science and ICT

Seoul, S.Korea

2017 **Magna Cum Laude**, High Distinction in General Scholarship at graduation

Berkeley, CA USA