Jungsoo Park

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EDUCATION

Georgia Institute of Technology

Doctor of Philosophy in Computer Science

Aug. 2024–Present

Atlanta, USA

Korea Univerity

Master of Engineering in Software

Seoul, Korea Mar. 2019–Aug. 2021

Korea Univerity

Bachelor of Economics in Statistics

Bachelor of Science in Computer Science & Engineering

Seoul, Korea Mar. 2013–Feb. 2019

Publications

- [1] **Jungsoo Park**, Junmo Kang, Gabriel Stanovsky, and Alan Ritter, "Can llms help uncover insights about llms? a large-scale, evolving literature analysis of frontier llms", in *Association for Computational Linguistics*, 2025.
- [2] Mujeen Sung, **Jungsoo Park**, Jaewoo Kang, Danqi Chen, and Jinhyuk Lee, "Optimizing test-time query representations for dense retrieval", *Empirical Methods in Natural Language Processing-Findings*, 2023.
- [3] Jimin Hong, **Jungsoo Park**, Daeyoung Kim, Seongjae Choi, Bokyung Son, and Jaewook Kang, "Empowering sentence encoders with prompting and label retrieval for zero-shot text classification", arXiv preprint, 2022.
- [4] **Jungsoo Park**, Gyuwan Kim, and Jaewoo Kang, "Consistency training with virtual adversarial discrete perturbation", in *North American Chapter of the ACL*, 2022.
- [5] **Jungsoo Park**, Sewon Min, Jaewoo Kang, Luke Zettlemoyer, and Hannaneh Hajishirzi, "Faviq: Fact verification from information-seeking questions", in *Association for Computational Linguistics*, 2022.
- [6] Gangwoo Kim, Hyunjae Kim, Jungsoo Park, and Jaewoo Kang, "Learn to resolve conversational dependency: A consistency training framework for conversational question answering", in Association for Computational Linguistics, 2021.
- [7] **Jungsoo Park**, Mujeen Sung, Jinhyuk Lee, and Jaewoo Kang, "Adversarial subword regularization for robust neural machine translation", in *Empirical Methods in Natural Language Processing-Findings*, 2020.

RESEARCH EXPERIENCE

Georgia Institute of Technology

Ph.D. Student

Atlanta, Georgia Aug. 2024–Present

- Conducting research on leveraging large language models (LLMs) to accelerate scientific discovery—for example, by extracting experimental results from scientific literature and aggregating them to uncover new insights
- Developing multimodal large language models to more effectively synthesize and interpret multimodal data in the scientific domain

University of Washington

Research Intern

Seattle, USA Feb. 2021–Jul. 2021

- Developed a challenging fact-verification dataset comprising claims and corresponding labels by leveraging information-seeking question-answer pairs
- Conducted research employing a noisy-channel approach to address challenges in question answering and natural language inference tasks

NAVER Corporation

Research Intern

Seongnam, Korea Jul. 2020–Dec. 2020 Investigated and analyzed the most optimal augmentation techniques tailored for few-shot semi-supervised classification tasks

Korea University
Master's Degree Researcher

Seoul, Korea
Jun. 2018–Aug. 2021

- Conducted research focused on optimizing query representations during test time to enhance efficiency and accuracy in dense retrieval systems
- Explored the application of consistency training frameworks to address conversational dependency challenges
- Investigated methods to enhance Neural Machine Translation models by employing adversarial augmentations within subword tokenizations

Work Experience

Georgia Institute of Technology

Atlanta, Georgia Aug. 2024–Present

Graduate Research Assistant

- o Support faculty-led research projects through a variety of academic and technical tasks
 - Lead a research project on automated literature analysis using large language models (LLMs) to uncover insights about the capabilities and behavior of LLMs themselves
 - o Assist with a funded research project focused on surveying the costs associated with training AI models

NAVER Corporation

Seongnam, Korea

Applied Scientist

Jul. 2021-Aug. 2024

- Key contributor to the development of a foundational vision-language model: Hyperclova-X-Vision
 - $\circ~$ Sub-lead on tasks focused on improving visual entity recognition, visual instruction following, and chart comprehension
 - Designed and implemented an open-ended evaluation framework to assess the multimodal model's capabilities comprehensively
- · Key contributor to the development of an AI agent-based writing tool service based on large language models
 - Employed modeling strategies to ensure the model's safety and mitigate potential risks during writing
 - $\circ\,$ Researched and developed retrieval-augmented writing for improving factual consistency
- Key contributor to the development of a general domain text embedding API
 - o Trained a multi-lingual sentence encoder adaptable for various applications, including retrieval and clustering tasks
 - Constructed a resilient classifier leveraging sentence encoders and label prompts augmented through retrieval techniques

SCHOLARSHIPS AND AWARDS

• Full Scholarship for all semesters attended at graduate school of Korea University

Mar. 2019–Jun. 2021

• Great Honor in Graduation at Korea University

Feb. 2019

• Full Scholarship for all semesters attended at Korea University

Mar. 2013-Feb. 2019

• Anam Scholarship (admission with highest distinction) at Korea University

Mar. 2013

Academic Training

Graduate Coursework

- Data Mining Techniques for discovering patterns and insights from large datasets.
- Numerical Linear Algebra Computational methods for solving linear systems and matrix operations.
- Information Extraction and Text Mining Methods for extracting structured information from unstructured text data.
- Bayesian Statistics Probabilistic modeling and inference using Bayes' theorem.
- Computer Vision Algorithms for interpreting and understanding visual data from the world.

Teaching

• Research Mentor August 2022

Researched building robust zero-shot classifier using sentence encoder and retrieval-augmented label prompts

• Tutoring Mentor at Korea University

 ${\rm Spring}~2018$

Tutored international students in mathematical statistics and elementary statistics

SERVICE

Mandatory Military Service

Apr. 2014-Apr. 2016

Republic of Korea Air Force

Reviewer

ACL-IJCNLP (2021), EMNLP (2021, 2022, 2023), ARR