Yoonsang Lee

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EDUCATION Seoul National University

Mar 2019 - Present

B.S. in Computer Science and Engineering

B.S. in Mathematical Sciences

* includes 1.5 year mandatory military service

Aug - Dec 2023

The University of Texas at Austin Exchange Student in Computer Science

Austin, TX

Seoul, Korea

Gyeonggi Science High School for the Gifted

Mar 2016 - Feb 2019

High school for students specialized in mathematics and science

Suwon, Korea

PUBLICATIONS

Yoonsang Lee*, Pranav Atreya*, Xi Ye, Eunsol Choi

Crafting In-context Examples according to LMs' Parametric Knowledge

Findings of NAACL 2024

Yoonsang Lee*, Dongryeol Lee*, Kyomin Jung

MILAB at PragTag-2023: Enhancing Cross-Domain Generalization through Data Augmen-

tation with Reduced Uncertainty EMNLP @ ArgMining 2023

Research

UT Austin NLP Lab

Aug 2023 - Present

EXPERIENCE

Research Assistant (Advisor: Dr. Eunsol Choi)

 Worked on project of various prompting strategies under multi-answer QA tasks, with focus on language model's parametric knowledge regarding in-context examples.

Language and Data Intelligence Lab

Jul - Oct 2023

Research Assistant (Advisor: Dr. Seungwon Hwang)

- Enhanced performance of dense retrieval on unseen domains by incorporating diverse search intents within synthetic query generation process.

Machine Intelligence Lab

Jul 2022 - Jul 2023

Research Assistant (Advisor: Dr. Kyomin Jung)

- Suggested ensemble schema to reduce uncertainty while performing data augmentation for pragmatic tagging. Ranked 1st on zero-shot track at ArgMining workshop.

Interships

Naver Clova AI, Research Intern

Jan - Feb 2023

- Implemented causal deep learning with alternating transformer on common DAG datasets.

Teaching

Algorithms, Teaching Assistant

Spring 2024

Computer Architecture, Teaching Assistant

Spring 2023

Electrical and Electronic Circuits, Teaching Assistant

Fall 2020

^{*:} equal contribution

Honors and	Semicon Scholarshp - 4,500 USD in total	2023 - 2024
Awards	Merit Based Scholarship - 7,800 USD over four years	2019 - 2024
	Army Commendation Medal	2022
	4th Place, Selected Topic Seminar 2 Presentation	2019
	Silver, Korea Olympiad in Informatics	2018

PROJECTS

Private Mobile Chatbot Application

Spring 2023

 Developed android chatbot application for automatic and private response of customer complaints. Implemented with homomorphic encryption, MPNet, and ChatGPT.

Modality Translation through Conditional Encoder-Decoder

Spring 2023

Designed general architecture that doesn't rely on specific latent encoder-decoder architecture and provides more accurate latent space prediction across different modalities.

NowSee, Real-time Weather Community

Fall 2022

 Developed web service for real-time weather community, where users can share live weather information and statistics.

Finding Abandoned Animals with Keywords

Summer 2019

 Developed precise search program for finding one's abandoned animal based on specified categories and similar keywords.

Collaborative Filtering Recommendation System Correcting User Spring 2018 Bias Based on Comments-Rating Relationship

- Designed CNN based recommender system to unbias user ratings with movie comments.

TECHNICAL SKILLS

Programming Languages C++, Java, Python, R, HTML/CSS, Javascript, Kotlin, SQL Frameworks and Tools PyTorch, ReactJS, Tensorflow, Django, Git, Docker Languages Korean (native), English (TOEFL 100 TOEIC 980)

Selected Coursework

Natural Language Processing, Information Retrieval and Web Search, Human-Computer Interaction, ML for Visual Understanding, Pattern Recognition, Statistical Computing

Extracurricular

LikeLion at SNU

Mar - Nov 2022

- Studied HTML/CSS, ReactJS, Django for web development

Sergeant, Korean Augmentaion to the US Army, Camp Humphreys Dec 2020 - Jun 2022 International Olympiad in Informatics Training Camp in Korea – Jul - Aug 2016, Jan 2017

- Studied advanced data structures and algorithms