# Yoonsang Lee

### lysianthus@snu.ac.kr \( \) lilys012.github.io

## EDUCATION Seoul National University

Mar 2019 - Present Seoul, Korea

B.S. in Computer Science and Engineering

\* includes 1.5 year mandatory military service

## The University of Texas at Austin

Aug - Dec 2023

Exchange Student in Computer Science

Austin, TX

### 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, Xi Ye, Eunsol Choi

AmbigDocs: Reasoning across Documents on Different Entities under the Same Name arXiv 2024

## 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 Assistant

Spring 2024

Computer Architecture, Teaching Assistant

Spring 2023

Electrical and Electronic Circuits, Teaching Assistant

Fall 2020

<sup>\*:</sup> equal contribution

Honors and Awards	Semiconductor Scholarship Merit Based Scholarship	2023 - 2024 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