# **DOSUNG LEE**

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Google Scholar in LinkedIn

GitHub

#### **EDUCATION**

Korea University Aug 2024

B.S. in Artificial Intelligence & Biology

Korea University Sep 2024 – Present

Ph.D. Student in Computer Science, Artificial Intelligence

Advisor: Prof. Paul Hongsuck Seo

Research Lab: Multimodal Interactive Intelligence Lab

Current research: RAG, Multimodal Learning, LLM Agents, Personalization

#### **PUBLICATIONS**

ACL 2025

The 63rd Annual Meeting of the Association for Computational Linguistics

- ReSCORE: Label-free Iterative Retriever Training for Multi-hop Question Answering with Relevance-Consistency Supervision
- · \*Dosung Lee, \*Wonjun Oh, Boyoung Kim, Minyoung Kim, Joonsuk Park, Paul Hongsuck Seo (\* equal contribution)
- · Project Page
- · 🏂 arXiv PDF

EMNLP 2025

The 2025 Conference on Empirical Methods in Natural Language Processing

- · ReTAG: Retrieval-Enhanced, Topic-Augmented Graph-Based Global Sensemaking
- · Boyoung Kim, **Dosung Lee**, Sumin An, Jinseong Jeong, Paul Hongsuck Seo
- · Project Page
- arXiv PDF

## **ONGOING PROJECTS**

## Fine-grained Multimodal RAG

Improving retrieval using cross-modal attention and fine-level alignment across image and text.

## Goal-Oriented LLM Agents with Tool Calling (Under review)

Building agents that decompose user goals, call external APIs or tools via function calling, and adapt through feedback loops.

## LLM Dynamic Persona Modeling with Memory Update

Modeling user-specific behaviors and preferences using long-term memory representations and real-time memory editing.

#### TEACHING ASSISTANT EXPERIENCE

Teaching Assistant for COSE 474: Deep Learning, Korea University

#### **HONORS & AWARDS**

Korea University Entrance Scholarship for Academic Excellence