

## Research Interest

I am broadly interested in NLP, particularly in human-centric conversational agents. Ultimately, I aim to develop effective virtual AI assistants that can support individuals in scenarios such as realistic NPC interactions and AR/MR/VR/Metaverse applications.

- In the pre-LLM era, I concentrated on dialogue systems incorporating individual personas and external knowledge in memory-based architectures.
- In the post-LLM era, I focused on persona-based role-playing LLM agents, with particular emphasis on evaluating and improving the factuality and reducing hallucinations in LLMs.
- My current research interest is in integrating multisensory perception into LLMs to support multimodal interactions. Specifically, I focus on evaluating (e.g., VLM-as-a-judge) and improving (e.g., via synthetic data generation) the factuality and reducing hallucinations in Multimodal LLMs.

## Education

### Seoul National University

Seoul, S.Korea

Ph.D. Candidate in Computer Science and Engineering; GPA: 4.2 / 4.3 (4.0 / 4.0)

Mar. 2022 -

- *Advisor:* Gunhee Kim (Vision and Learning Lab)

### Seoul National University

Seoul, S.Korea

M.S. in Computer Science and Engineering; GPA: 4.06 / 4.3 (3.88 / 4.0)

Sep. 2019 - Feb. 2022

- *Advisor:* Gunhee Kim (Vision and Learning Lab)
- *Thesis:* Leveraging Image Turn for Self-Supervised Multimodal Representation Learning in Image-Grounded Dialogues
- *Committee:* Sun Kim, Gunhee Kim, and Hyun Oh Song

### Korea University

Seoul, S.Korea

B.S. in Computer Science and Engineering; GPA: 4.15 / 4.5 (3.84 / 4.0)

Mar. 2014 - Feb. 2019

## Publications

\* DENOTES EQUAL CONTRIBUTION

### Can LLMs Understand Sense Ambiguity in Figurative Language? Evaluating LLMs' Figurative Word Sense Knowledge

Under Review

Seokwon Song\*, Taehyun Lee\*, [Jaewoo Ahn](#), Jae Hyuk Sung, Gunhee Kim

### TimeChara: Evaluating Point-in-Time Character Hallucination of Role-Playing Large Language Models

ACL 2024 Findings

[Jaewoo Ahn](#), Taehyun Lee, Junyoung Lim, Jin-Hwa Kim, Sangdoo Yun, Hwaran Lee, Gunhee Kim

### Who Wrote this Code? Watermarking for Code Generation

ACL 2024

Taehyun Lee\*, Seokhee Hong\*, [Jaewoo Ahn](#), Ilgee Hong, Hwaran Lee, Sangdoo Yun, Jamin Shin, Gunhee Kim

### mRedditSum: A Multimodal Abstractive Summarization Dataset of Reddit Threads with Images

EMNLP 2023

Keighley Overbay, [Jaewoo Ahn](#)\*, Fatemeh Pesaran Zadeh\*, Joonsuk Park, Gunhee Kim

### MPCHAT: Towards Multimodal Persona-Grounded Conversation

ACL 2023

[Jaewoo Ahn](#), Yeda Song, Sangdoo Yun, Gunhee Kim

### Sequential Latent Knowledge Selection for Knowledge-Grounded Dialogue

ICLR 2020

Byeongchang Kim, [Jaewoo Ahn](#), Gunhee Kim

Spotlight

## Experience

- *Advisor:* Gunhee Kim
- Worked on “Sequential Latent Knowledge Selection for Knowledge-Grounded Dialogue” with SKT corporation

## Awards

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### Outstanding TA Award

College of Engineering, Seoul National University

2024

### TA·RA Scholarship

Department of Computer Science and Engineering, Seoul National University

2023

### Gold Award, 26th HumanTech Paper Award

Samsung Electronics

2020

### Tuition Scholarship

Office of International Affairs, Seoul National University

2019-2020

### 1st Place, K-Startup 2017 National Competition

Korean Ministry of Education

2017

## Academic Service

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### Conference Reviewer

ACL (2024 - ), EMNLP (2024 - ), ECCV (2024 - ), ACL Rolling Review (2024 - )

### Journal Reviewer

IJCV (2023 - ), IEEE/ACM Transactions on Audio Speech and Language Processing (2023 - )

### Teaching Assistant

Computer Vision (2020, 2023), Graduate Artificial Intelligence (2021, 2022)