

#### Al Researcher · Al Engineer

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# Summary .

M.S. candidate in Computer Science and Engineering at Korea University (Advisor: Heuiseok Lim), with research and engineering experience across multiple Al domains. Passionate about advancing Al and unafraid to explore new ideas, I have worked with diverse modalities and problems, including:

- · Representation Learning
- · Knowledge Editing
- Information Extraction
- Retrieval-Augmented Generation (RAG)
- Uncertainty Estimation
- · Automatic Speech Recognition (ASR)

# **International Publications**

† (Corresponding author)

#### Enhancing Automatic Term Extraction with Large Language Models via Syntactic Retrieval

Yongchan Chun, Minhyuk Kim, Dongjun Kim, † Chanjun Park, † HeuiSeok Lim

ACL 2025 - Findings of the Annual Meeting of the Association for Computational Linguistics

#### **Benchmark Profiling: Mechanistic Diagnosis of LLM Benchmarks**

Dongjun Kim, Gyuho Shim, **Yongchan Chun**, Minhyuk Kim, <sup>†</sup> Chanjun Park, <sup>†</sup> HeuiSeok Lim

EMNLP 2025 - Proceedings of the Conference on Empirical Methods in Natural Language Processing

#### KoLEG: On-the-Fly Korean Legal Knowledge Editing with Continuous Retrieval

Jaehyung Seo, Dahyun Jung, **Yongchan Chun**, Jaewook Lee, Dongjun Kim, Hwijung Ryu, Donghoon Shin, <sup>†</sup> HeuiSeok Lim

EMNLP 2025 - Findings of the Conference on Empirical Methods in Natural Language Processing

## Domestic Publications \_\_\_\_\_

#### **KONVERSE:** An End-to-End Model for Translating English Speech to Korean Text

YONGCHAN CHUN, MINHYUK KIM, DONGJUN KIM, † CHANJUN PARK, † HEUISEOK LIM

HCLT 2024 - Annual Conference on Human and Language Technology (Oral)

#### **UKoSpeech: A Universal Korean ASR System for Diverse Domains**

YONGCHAN CHUN, MINHYUK KIM, DONGJUN KIM, † CHANJUN PARK, † HEUISEOK LIM

HCLT 2025 - Annual Conference on Human and Language Technology (Oral)

### **Honors & Awards**

2023	Exellence	Award,	Capstone	Project
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2024 **Silver Prize**, Al x Bookathon Hackathon

2024 **Exellence Award**, Software Maestro

University of Seoul Sungkyunkwan University Seoul, S.Korea



#### (National Initiative) National Representative AI — World Best LLM

NC AI, Korea University, ETRI, KAIST, SNU, LOTTE Innovate, POSCO DX

RESEARCH ENGINEER Aug. 2025 – Dec. 2025

- Participated in Korea's National Representative AI initiative (supported by NIPA, IITP, and NIA).
- The project involves working on servers equipped with approximately 1,000 NVIDIA H100 GPUs.
- Led data preprocessing and developed the LLM evaluation framework.

#### (Independent Research) Dataset Filtering for Domain Adaptation of ASR Models

Korea University Sep 2025 – Feb 2026

• Conducting research on improving preprocessing techniques for domain-specific ASR datasets.

- · Propose a novel metric for dataset filtering that excludes term-level dependencies when computing WER or CER.
- Manuscript to be submitted to **Interspeech 2026** as first author.

#### (Independent Research) Uncertainty Estimation of Large Pretrained Models

Korea University

RESEARCH ENGINEER

May 2025 - Nov 2025

- Investigating the reliability and uncertainty estimation of large pretrained models.
- Treated large pretrained models (including LLMs) as classifiers and used evidential deep learning for second-order uncertainty estimation.
- Propose a Variational Autoencoder (VAE) to provide a pretrained model with improved uncertainty estimates in Bayesian manner.
- To be submitted to CVPR 2026 as first author.

#### (Industry-Academic Joint Project) Unlearning for LLM Reliability

KT & Korea University

Apr. 2024 - May 2025

RESEARCH ENGINEER

- Developed RAG-based editing with lifelong learning for the legal domain.
- Trained a BGE-M3-based retriever using a novel hard-negative mining strategy.
- Published at EMNLP Findings 2025

# (Collaborative Research) Ramp lesion detection using an end-to-end deep learning framework

ChungAng University Hospital & Korea University

RESEARCH ENGINEER May 2024 – Nov. 2025

- · Developed an end-to-end model to detect whether a patient has a ramp lesion using image and tabular data.
- · Proposed a three-stage representation-learning pipeline to fuse image and tabular features effectively.
- Improved prior SOTA by approximately 20%.
- To be submitted to *The American Journal of Sports Medicine* as first author.

# (Collaborative Research) MAGIC: Multi-Lingual Automated YouTube Subtitle Generation Human-Inspired AI Research Center and Interpretation Companion & Korea University

RESEARCH ENGINEER May 2024 – Nov. 2024

- Developed an automatic speech recognition (ASR) inference pipeline.
- · Achieved an approximately 2.5×transcription speedup by combining WhisperX batch inference with the Groq API.
- Deployed at magic.kullm.ai.

#### (National-Funded Project) AI-based personal note-taking assistant

Software Maestro
Mar. 2023 - Dec. 2023

RESEARCH ENGINEER

• Built an Al-based personal note-taking service.

- Developed a data-curation pipeline to collect training data for ASR domain adaptation.
- Deployed the ASR model on-premises using Kubernetes and Ray.
- Implemented RAG-based summarization and question answering.

#### (Industry-Academic Joint Project) Fake hospital receipt detection

Samsung SDS & University of Seoul

Aug. 2022 - Mar. 2023

- Built a binary classifier to detect fake hospital receipts.
- Used a GAN-based representation model to encode receipt images and trained a classifier on top.
- Constructed a hard negative mining dataset for fine-grained, robust classification.

Skills\_

RESEARCH ENGINEER

**Programming** Python

Machine Learning & Deep Learning
Uncertainty Estimation, Representation Learning
Natural Language Processing
Information Extraction, RAG, Knowledge Editing

**Speech** Automatic Speech Recognition

Model Serving Kubernetes, Ray
Language Skills Korean, English



Korea University Seoul, S.Korea

M.S. IN COMPUTER SCIENCE AND ENGINEERING

Mar. 2024 - Feb. 2026

- Advisor: Heuiseok Lim
- Natural Language Processing & Artificial Intelligence Lab

University of Seoul, S.Korea Seoul, S.Korea

B.S. IN GEOINFORMATICS

- · Advisor: Youngmin Roh
- Interned at Machine Intelligence Lab (Aug.2022 Aug.2023)
- TA of Data Mining (Spring 2023)

# **Extracurricular Activity**

TAVE (Data Science & AI Club)

Seoul, S.Korea

Mar. 2017 - Aug. 2023

Mar. 2021 – Dec. 2022

- · Organized technical events and member sessions to strengthen networking among core members.
- · Competed in multiple data-analysis challenges and hackathons.

#### Software Maestro (National software entrepreneurship training program)

Seoul, S.Korea

Mar. 2023 - Dec. 2023

- Built an Al-based note-taking assistant as part of a 3-person team.
- Ranked in the top 6% (finalist), which was awarded a CES visit and a two-week course at CMU.
- Transferred the technology to a software solutions company.