Chanwoong Yoon

Email | LinkedIn | Google Scholar | Homepage

RESEARCH INTERESTS

Natural Language Processing, AI Safety, Model Interpretability

EDUCATION

Korea University   Mar. 2024 - Present
M.S. - Computer Science and Engineering; GPA: 4.0/4.0
Hanyang University   Mar. 2017 - Feb. 2023
B.S. - Software, College of Computing; GPA: 3.66/4.0

EXPERIENCE

Georgia Institute of Technology   Oct. 2025 - Present
Visiting Researcher
- Advisor: Alan Ritter
Data Mining and Information Systems Lab, Korea University   Aug. 2023 - Sep. 2025
Research Assistant
- Advisor: Jaewoo Kang
Electronics and Telecommunications Research Institute (ETRI)   Jul. 2022 - Aug. 2022
Research Intern
- Advisor: Junseong Bang

SELECTED PUBLICATIONS

CompAct: Compressing Retrieved Documents Actively for Question Answering
Chanwoong Yoon, Taewhoo Lee, Hyeon Hwang, Minbyul Jeong, Jaewoo Kang
EMNLP 2024

Ask Optimal Questions: Aligning Large Language Models with Retriever's Preference in Conversational Search
Chanwoong Yoon*, Gangwoo Kim*, Byeongguk Jeon, Sungdong Kim, Yohan Jo, Jaewoo Kang
Findings of NAACL 2025

ETHIC: Evaluating Large Language Models on Long-Context Tasks with High Information Coverage
Taewhoo Lee, **Chanwoong Yoon**, Kyochul Jang, Donghyeon Lee, Minju Song, Hyunjae Kim, Jaewoo Kang
NAACL 2025

Does Time Have Its Place? Temporal Heads: Where Language Models Recall Time-specific Information
Yein Park, **Chanwoong Yoon**, Jungwoo Park, Minbyul Jeong, Jaewoo Kang
ACL 2025

ChroKnowledge: Unveiling Chronological Knowledge of Language Models in Multiple Domains
Yein Park, **Chanwoong Yoon**, Jungwoo Park, Donghyeon Lee, Minbyul Jeong, Jaewoo Kang
ICLR 2025

FULL PUBLICATIONS

Assessing LLM Reasoning Steps via Principal Knowledge Grounding
Hyeon Hwang, Yewon Cho, **Chanwoong Yoon**, Yein Park, Minju Song, Kyungjae Lee, Gangwoo Kim, Jaewoo Kang
Findings of EMNLP 2025

Outlier-Safe Pre-Training for Robust 4-Bit Quantization of Large Language Models
Jungwoo Park, Taewhoo Lee, **Chanwoong Yoon**, Hyeon Hwang, Jaewoo Kang
ACL 2025

Rationale-Guided Retrieval Augmented Generation for Medical Question Answering
Jiwoong Sohn, Yein Park, **Chanwoong Yoon**, Sihyeon Park, Hyeon Hwang, Mujeen Sung, Hyunjae Kim, Jaewoo Kang
NAACL 2025

LAPIS: Language Model-Augmented Police Investigation System
Heedou Kim, Dain Kim, Jiwoo Lee, **Chanwoong Yoon**, Donghee Choi, Mogan Gim, Jaewoo Kang
CIKM 2024

Small Language Models Learn Enhanced Reasoning Skills from Medical Textbooks
Hyunjae Kim, Hyeon Hwang, Jiwoo Lee, Sihyeon Park, Dain Kim, Taewhoo Lee, **Chanwoong Yoon**, Jiwoong Sohn, Donghee Choi, Jaewoo Kang
NPJ Digital Medicine

RESEARCH ACTIVITY

Data Mining and Information Systems Lab, Korea University   Aug. 2023 - Sep. 2025
- Context Compression for Retrieved-Augmented Language Model
  - Employed an active strategy to condense extensive documents without losing key information in retrieved corpus.
  - Demonstrated significant improvements in both performance and compression rate on question-answering benchmarks
  - Showcased flexibility as a cost-efficient plug-in module with various off-the-shelf retrievers or readers, achieving exceptionally high compression rates (47x).
- RetPO: Retriever's Preference Optimization
  - Developed a RETPO, a novel framework to optimize a language model for reformulating search queries in line with the preferences of target retrieval systems.
  - Achieved state-of-the-art performance, significantly outperforming existing baselines, including GPT-3.5.

Electronics and Telecommunications Research Institute (ETRI)   Jul. 2022 - Aug. 2022
- Trained efficient dialogue state tracking models with parameter-efficient fine-tuning

AWARDS AND HONORS

Research Fund Recipient, Korea Institute for Advancement of Technology (KIAT)   May 2025
- Selected to receive over USD 21,000 in research support
Outstanding Research Paper Award, Korea University   Feb. 2025
- CompAct: Compressing Retrieved Documents Actively for Question Answering (EMNLP 2024)
Encouragement Award, KIISE Korea Computer Congress Competition   Jul. 2022
Merit-based Scholarships (50% Tuition), Hanyang University   Fall 2020 — Spring 2022

TECHNICAL SKILLS

Programming: Python, C, C++
Libraries: PyTorch, NumPy, Matplotlib, Transformers, TransformerLens
Machine Learning & Deep Learning (LLMs): Post-training Strategies (Fine-tuning, DPO)
Natural Language Processing (NLP): Information Retrieval, Retrieval-Augmented Generation

RESEARCH & ANALYTICAL SKILLS

Theoretical Foundations: Linear Algebra, Probabilistic Modeling, Information Theory
Scientific Writing & Publication: Experience publishing at top-tier conferences (ICLR, ACL, EMNLP, NAACL, CIKM)
Collaboration & Mentorship: Experience in academic collaborations as a first author and co-author (mentoring junior researchers)

ACADEMIC SERVICE

ICLR 2026
- Reviewer
ARR Review (Dec. 2025), ACL 2025
- Secondary Reviewer

LANGUAGE

Korean (Native)
English (TOEFL: 104)