TAEYOON KWON

</> connoriginal.github.io   in linkedin.com/in/taeyoon-kwon   ✉ kwonconnor101@yonsei.ac.kr

RESEARCH INTEREST

AI Agents, Foundation Models
(M)LLM Agents (Physical and Digital), RL for Long-horizon Tasks, Code LLMs, AI for Science

EDUCATION

Yonsei University | Advisor: Jinyoung Yeo   Sep. 2023 - Present
M.S. in Artificial Intelligence

Hanyang University (ERICA)   Mar. 2017 - Feb. 2023
B.S. in Computer Science, Summa Cum Laude   *GPA: 3.75/4.0*

Republic of Korea Army   Jan. 2018 - Sep. 2019
Seargent

PUBLICATIONS & PREPRINTS

(* Equal contribution)

PREPRINT

[P1] Embodied Agents Meet Personalization: Investigating Challenges and Solutions Through the Lens of Memory Utilization [paper][webpage]
Taeyoon Kwon*, Dongwook Choi*, Hyojun Kim, Sunghwan Kim, Seungjun Moon, Beong-woo Kwak, Kuan-Hao Huang, Jinyoung Yeo
Arxiv preprint. 2025

REFEREED CONFERENCE PAPER

[C9] Web-Shepherd: Advancing PRMs for Reinforcing Web Agents [paper]
Hyungjoo Chae*, Sunghwan Kim*, Junhee Cho*, ..., **Taeyoon Kwon**, ..., Jinyoung Yeo
Neurips 2025 (Spotlight)

[C8] Designing Memory-Augmented AR Agents for Spatiotemporal Reasoning in Personalized Task Assistance [paper]
Dongwook Choi, **Taeyoon Kwon**, Dongil Yang, Hyojun Kim, Jinyoung Yeo
XRMemory Workshop, IEEE ISMAR 2025

[C7] Rethinking Reward Model Evaluation Through the Lens of Reward Overoptimization [paper]
Sunghwan Kim*, Dongjin Kang*, **Taeyoon Kwon**, Hyungjoo Chae, Jungsoo Won, Dongha Lee, Jinyoung Yeo
ACL 2025 (Oral)

[C6] Towards Lifelong Dialogue Agents via Timeline-based Memory Management [paper]
Kai Tzu-iunn Ong*, Namyoung Kim*, Minju Gwak, Hyungjoo Chae, **Taeyoon Kwon**, Yohan Jo, Seung-won Hwang, Dongha Lee, Jinyoung Yeo
NAACL 2025

[C5] COFFEE-GYM: An Environment for Evaluating and Improving Natural Language Feedback on Erroneous Code [paper][demo]
Hyungjoo Chae*, **Taeyoon Kwon***, Seungjun Moon*, Yongho Song, Dongjin Kang, Kai Tzu-iunn Ong, Beong-woo Kwak, Seonghyeon Bae, Seung-won Hwang, Jinyoung Yeo
EMNLP 2024

[C4] Language Models as Compilers: Simulating Pseudocode Execution Improves Algorithmic Reasoning in Language Models [paper]

Hyungjoo Chae, Yeonghyeon Kim, Seungone Kim, Kai Tzu-iunn Ong, Beong-woo Kwak, Moohyeon Kim, Seonghwan Kim, **Taeyoon Kwon**, Jiwan Chung, Youngjae Yu, Jinyoung Yeo

EMNLP 2024

[C3] Can Large Language Models be Good Emotional Supporter? Mitigating Preference Bias on Emotional Support Conversation [paper]

Dongjin Kang*, Sunghwan Kim*, **Taeyoon Kwon**, Seungjun Moon, Hyunsouk Cho, Youngjae Yu, Dongha Lee, Jinyoung Yeo

ACL 2024 (Outstanding Paper Award)

[C2] Large Language Models are Clinical Reasoners: Reasoning-Aware Diagnosis Framework with Prompt-Generated Rationales [paper]

Taeyoon Kwon*, Kai Tzu-iunn Ong*, Dongjin Kang, Seungjun Moon, Jeong Ryong Lee, Dosik Hwang, Yongsik Sim, Beomseok Sohn, Dongha Lee, Jinyoung Yeo

AAAI 2024

[C1] Dialogue Chain-of-Thought Distillation for Commonsense-aware Conversational Agents [paper]

Hyungjoo Chae*, Yongho Song*, Kai Tzu-iunn Ong, **Taeyoon Kwon**, Minjin Kim, Youngjae Yu, Dongha Lee, Dongyeop Kang, Jinyoung Yeo

EMNLP 2023

REFEREED JOURNAL PAPER

[J1] Multi-task Deep Learning for Joint Detection of Necrotizing Viral and Non-infectious Retinitis from Common Blood and Serology Test Data [paper]

Kai Tzu-iunn Ong*, **Taeyoon Kwon***, Harok Jang, Min Kim, Christopher Seungkyu Lee, Suk Ho Byeon, Sung Soo Kim, Jinyoung Yeo, Eun Young Choi

IOVS 2024

ACADEMIC SERVICES

Reviewer

ACL ARR	Feb. 2025, Oct., Dec. 2024
ICLR	Oct. 2025

Teaching Assistant (Academic)

Natural Language Processing (CAS3301) | Yonsei University, Seoul, South Korea	Spring. 2025
Introduction to Computing (CAS1103) | Yonsei University, Seoul, South Korea	Spring. 2025
Introduction to Artificial Intelligence (AAI2250) | Yonsei University, South Korea	Fall. 2024
Natural Language Processing (AAI3301) | Yonsei University, Seoul, South Korea	Spring. 2024

Teaching Assistant (Industrial)

Introduction to Natural Language Processing | SKT Academy, Seoul, South Korea	Aug. 2025, Jul. 2024, Aug. 2023
AI Expert Class | Samsung, Seoul, South Korea	Jul. 2025, Jul. 2024

AWARDS & HONORS

Spotlight | Neurips 2025	2025
Outstanding Paper Award | ACL 2024	2024
AI Graduate School Support Scholarship | Yonsei University	2023
Summa Cum Laude | Hanyang ERICA University	2023
Academic Excellence Scholarship | Hanyang ERICA University	2022-2, 2020-2, 2017-2, 2017-1

Research & Work Experience

Market Designers Inc. - Tutoring | Seoul, South Korea   Mar. 2023 - Aug. 2024
Part-time Research Scientist and NLP Engineer
- Lead project solving real-world scenarios by deploying LLM-driven applications
- Contribute to development of LLM-based English tutoring system
- Participate in constructing a continuous integration system for chatbot content

Convei Lab | Yonsei University, Seoul, South Korea   Oct. 2022 - Sep. 2023
Undergraduate Research Intern
- Advisor: Jinyoung Yeo
- Led project developing novel framework for diagnosis leveraging LLMs' reasoning capabilities
- Co-led project applying ML/DL techniques in medical domain, resulting in journal publication [J1]