

Education

Stanford University

Palo Alto, USA

Masters, Computer Science, 4.252 GPA

- Research: LLM post-training (RLHF / GRPO), representation learning of text and LLM synthetic data.
- Selected Coursework: Independent Research (A+), NLP with Deep Learning (A+), Human-Centered LLMs (A+), AI: Principles & Techniques (A+), Probability for Computer Scientists (A+)
- Teaching: Course Assistant for CS221 AI: Principles & Techniques (Fall 2025)

KTH Royal Institute of Technology

Stockholm, Sweden

Exchange Student, Computer Science

Korea Advanced Institute of Science and Technology

Daejeon, Korea

Bachelor of Science, Physics & Computer Science

Work Experience

NAVER LABS Seoul, Korea

Research Intern

- A member of NAVER Clova team, working on LLM research.
- Prepared a Reinforcement Learning publication in 3 months, from ideation, experimentation to authorship.

Monoclear.ai Seattle, USA

Founder

- Launched the world's 1st "Korean LLM leaderboard" in collaboration with Eleuther AI, integrated 20K samples of 14 categorical LLM evaluation datasets. Evaluation consists of 3-shot and log-likelihood evaluation pipelines.
- Built <u>Monoclear.ai</u>, an AI web platform for enhanced evaluation of **LLM performance and safety**. 300+ reactions across social media with visitors from 10 countries.

Amazon & AWS Seattle, USA

Machine Learning Engineer II @ Alexa AI, AWS AI

- NLP research on contrastive learning of **text embeddings** for dialogue, resulting in <u>2 publications</u>. Advised by Dr. Guoyin Wang. Improved classification accuracy metric by 32% on 834K synthetic dialogue sentences.
- Performed large-scale data augmentation and evaluation metric reporting with PySpark. Improved intent recall
 performance by 34% on 2M production voice assistant utterances.
- Maintained mission critical multi-tenant Distributed Systems of 4000 TPS.

Hyperconnect (acquired by Match Group - Los Angeles, USA)

Seoul, Korea

Technical Project Lead

- Built 2 AI mobile applications while **leading a team of 10**, with object detection and image segmentation features. Achieved 550K+ organic downloads. Picai(Press), Aicut(Press)
- Handled 80 personnel for data gathering / data augmentation for image-based recommendation models.

Publications & Patents

- [1] Minsik Oh, Jiwei Li and Guoyin Wang. <u>Template-assisted Contrastive Learning of Task-oriented Dialogue</u> Sentence Embeddings. *ACL (To Appear)*, 2026
- [2] Minsik Oh, Sungju Kim, Douwe Kiela, Guoyin Wang, Kang Min Yoo and Joosung Lee. <u>Continual Pre-Training</u> for Hallucination Reduction. *Preprint*, 2025
- [3] Minsik Oh, Advit Deepak, Sophie Wu, Douwe Kiela and Ekaterina Shutova. Multi-Cultural Preference Optimization of Reward Models. Preprint, 2025
- [4] Mehmet Hamza Erol*, Minsik Oh* and Douwe Kiela. <u>Dynamic Summarization Length Control via Model Merging</u>. *Preprint*, 2025
- [5] Minsik Oh, Joosung Lee, Jiwei Li and Guoyin Wang. PK-ICR: Persona-Knowledge Interactive Context Retrieval for Grounded Dialogue. EMNLP Main Conference (Oral Presentation), 2023.

- [6] Joosung Lee, Minsik Oh and Donghun Lee. <u>P5</u>: Plug-and-Play Persona Prompting for Personalized Response Selection. *EMNLP Main Conference (Poster Presentation)*, 2023.
- [7] Minsik Oh, Guoyin Wang, Taiwoo Park and Puyang Xu. <u>Template-augmented Dialogue Representation</u> Learning. *KnowledgeNLP-AAAI'23*, 2023.
- [8] Minsik Oh*, Minsang Kim*. Persona-Knowledge Dialogue Multi-Context Retrieval and Enhanced Decoding Methods. The 1st Workshop on Customized Chat Grounding Persona and Knowledge @ COLING, 2022.
- [9] Minsik Oh. NEAMER Named Entity Augmented Multi-word Expression Recognizer. The 16th International Workshop on Semantic Evaluation @ NAACL, 2022.
- [10] SERVER AND OPERATING METHOD THEREOF. US 11080325, Hyperconnect, INC.
- [11] TERMINAL AND IMAGE PROCESSING METHOD THEREOF. US 10855933, Hyperconnect, INC.

Personal Projects

Korean LLM Leaderboard - monoclear.ai

• Integrated KLUE subset, KOBEST and HAE-RAE Bench few-shot on-demand evaluations using **LM evaluation** harness. 10K lines of heavily custom **Python** and **React** code. 300+ reactions from 10 countries.

Sentence Transformers (Distinction from HuggingFace) - repository

• Built 20 **text embedding** models with large-scale customized pre-training data mixtures, utilizable for search(retrieval) and Question Answering. Work with S-BERT author. 150K downloads of HuggingFace models.

KoCLIP - code

• Handled 10K indexes of 512 dimension **CLIP model** vectors while implementing image search using NMSLIB, in the intersection of NLP and CV. 140+ stars on GitHub.

Awards & Certificates

1st place in CCGPK Shared Task @ COLING

- 1st place in both tasks of dialogue grounding retrieval and text generation.
- Resulted in an EMNLP publication and a workshop publication.

2nd place in SemEval Shared Task @ NAACL

- Participated in Task 2: Multilingual Idiomaticity Detection and Sentence Embedding.
- Resulted in a workshop publication.

1st place in Analyticon Visualization Contest @ AWS

- Company-wide data visualization competition of over 100 submissions, used Python on the project.
- Custom glass trophy awarded.

Special Nominees in HuggingFace Competition

- HuggingFace event comprising 100 projects & 800 participants, built SOTA Sentence Embeddings.
- Google Cloud Platform credits awarded.

Mensa Member

Silver Medal, Special Award in KPhO

• National-level Physics Olympiad in Korea.

Academic Reviewer

- EMNLP reviewer
- ARR (ACL Rolling Review), SemEval reviewer
- ICLR Tiny Papers Track reviewer
- AMLC (Amazon Machine Learning Conference) reviewer

Technical Skills

Languages: Python, Java, Kotlin, Scala, Typescript, C/C++ **AI Tools**: Pytorch, Pandas, Numpy, HuggingFace, Tensorflow

Technologies/Frameworks: AWS, Spark, Flask, Django, FastAPI, React, Next.js, Gradio, Streamlit