Nicole Hee-Yeon Kim

nicolekim@kaist.ac.kr | Department of Industrial & Systems Engineering, KAIST | Personal Page Nationality: United States of America and Republic of Korea (Dual Citizenship)

RESEARCH INTEREST

Multimodal Large Language Models (LLMs), Vision-Language Models (VLMs), Image & Video Understanding, Human-AI Interaction, Multimodal Processing

EDUCATION

Korea Advanced Institute of Science and Technology

Feb 2024 - Present

Master's Program, Department of Industrial & Systems Engineering, Overall GPA: 3.85/4.0

Daejeon, South Korea

• Yonsei University

Bachelor's Program, Department of Industrial Engineering, Overall GPA: 3.70/4.0

Mar 2019 - Feb 2024 Seoul, South Korea

PUBLICATIONS

- **Kim, N.** and Song, H. (2025). Robust Dataset Condensation using Supervised Contrastive Learning. In *Proceedings of International Conference on Computer Vision (ICCV 2025)*, Accepted (Poster).
- Min, H., Lee, Y., Ban, M., Deng, J., **Kim, N.**, Yun, T., Su, H., Cai, J., Song, H. (2025). Towards Multi-dimensional Evaluation of LLM Summarization across Domains and Languages. In *Proceedings of the 63rd Annual Meeting of the Association for Computational Linguistics (ACL 2025)*, Main conference paper.
- Kim, T., Lee, S., Kang, J., Choi, Y., Yun, W., **Kim, N.**, Chen, Z., Xie, L., Song, K. (2025). IMC: A Benchmark for Invariant Learning under Multiple Causes. In *Proceedings of the CVPR 2025 Workshop on Domain Generalization: Evolution, Breakthroughs, and Future Horizons*, Best Paper Award.
- Oh, J., Choi, J., **Kim, N.**, Yun, T., Kwon, R., Song, H. (2025). Learning to Verify Summary Facts with Fine-Grained LLM Feedback. In *Proceedings of the 2025 International Conference on Computational Linguistics* (*COLING 2025*), Selected for Oral Presentation.
- Kim, N., Choi, J., Lee, Y., Song, H. (2025). Robust Dataset Condensation via Semi-Supervised Learning. In *Proceedings of the Korea Computer Congress (KCC 2025)*, Selected for Oral Presentation.
- Oh, J., Choi, J., **Kim, N.**, Song, H. (2025). Improving Language Model Quality through LLM-based Fine-Grained Hallucinated Summary Generation. *Journal of Computing Practice*, vol. 31(2), pp. 91-97.
- **Kim**, **N.**, Lee, Y., Song, H. (2024). Robust Dataset Condensation via Supervised Contrastive Learning. In *Proceedings of the Korea Software Congress (KSC 2024)*, Selected for Oral Presentation.
- Oh, J., Choi, J., **Kim, N.**, Song, H. (2024). Improving the Text Summary Quality Through Understanding the Hallucination Level of Summarization Using Large Language Models. In *Proceedings of the Korea Computer Congress (KCC 2024)*, Selected for Oral Presentation.

RESEARCH EXPERIENCE

• DISL Lab, Department of Industrial & Systems Engineering, KAIST

Feb 2024 - Present

Master's Student

Daejeon, South Korea

Led the research project "Robust Dataset Condensation using Supervised Contrastive Learning" as

- Led the research project "Robust Dataset Condensation using Supervised Contrastive Learning" as the sole first author (accepted at ICCV 2025).
- Currently conducting research on multimodal large language models (MLLMs).
- MLAI Lab, Department of Applied Statistics, Yonsei University

Sep 2023 - Feb 2024

Undergraduate Research Intern

Seoul, South Korea

• Designed and constructed the PlayingCard-10 dataset, a core component of "IMC: A Benchmark for Invariant Learning under Multiple Causes" (CVPR 2025 Workshop Best Paper Award).

PATENT

• Patent Pending - KAIST Patent Registration ID: P2025-0286, Title: Robust Dataset Condensation using Supervised Contrastive Learning.

SCHOLORSHIPS

• KAIST Support Scholarship

Feb 2024 - Present

Government-funded full tuition scholarship for M.S. program

KAIST

• Brain Korea 21 (BK21) Scholarship

Feb 2024 - Present

Government-funded research scholarship for graduate students

National Research Foundation of Korea

Yonsei Welfare Scholarship

Mar 2019 - Jun 2023

 $Full\ tuition\ scholarship\ for\ B.S.\ program$

Yonsei University

University Innovation Support Scholarship

Sep 2020 - Feb 2021

Scholarship awarded for the development and advancement of an innovative start-up idea

Yonsei University

• Teaching Assistant Scholarship for the Data Science Program

Dec 2020 - Feb 2021

Teaching assistant for the Data Science program, responsible for editing and preparing lecture videos

Yonsei University

HONORS AND AWARDS

Best Paper Award

Jun 2025

CVPR 2025 Workshop on Domain Generalization: Evolution, Breakthroughs, and Future Horizons

• Outstanding Presentation Paper Award

Jul 2024

Korea Computer Congress 2024

• 1st Place, Promotional Video Contest

Feb 2022

Department of Industrial Engineering, Yonsei University

• Yonsei Social Entrepreneurship Award

Feb 2021

Yonsei University

SKILLS

• Programming Languages: Python, Java, JavaScript, Prolog, Linux

• Web Technologies: Django, CSS, HTML, React

• AI Technologies: PyTorch

• Database Technologies: MySQL

LANGUAGE PROFICIENCY

• Languages: Korean (Native), English (Fluent, TOEFL iBT 111)

LEADERSHIP EXPERIENCE

• Academic & Campus Life Mentor for Freshmen
Institute for Higher Education Innovation, Yonsei University

Oct 2019 - Aug 2020

• Freshman Class President

Mar 2019 - Aug 2019

Department of Industrial Engineering, Yonsei University