# Nicole Hee-Yeon Kim

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# **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, United States

• 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, South Korea

# **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

Oct 2019 - Aug 2020

Institute for Higher Education Innovation, Yonsei University

• Freshman Class President

Mar 2019 - Aug 2019

Department of Industrial Engineering, Yonsei University