Heejeong Nam

hazel-heejeong-nam.github.io

Research Interests

Representation learning, AI for Science, Causality, Multimodal Models

Education

Brown University (expected) 2025 ∼ 2027
Master of Science in Computer Science (FULBRIGHT Graduate Student)

Yonsei University 2019 ∼ 2024
Bachelor of Science in Electrical and Electronic Engineering. Minor in Astronomy

University of California, Los Angeles 2022 ∼ 2022
Exchange Program, Electrical and Computer Engineering

Publications

† *denotes equal contribution.*

[1] Guijin Son, Jiwoo Hong, Honglu Fan, **Heejeong Nam**, Hyunwoo Ko, Seungwon Lim, Jinyeop Song, Jinha Choi, Gonçalo Paulo, Youngjae Yu, Stella Biderman (2025).'When AI Co-Scientists Fail: SPOT-a Benchmark for Automated Verification of Scientific Research". *Preprint* [data] [paper]

[2] **Heejeong Nam**†, Jinwoo Ahn†. Keummin Ka, Jiwan Chung, Youngjae Yu (2025)."VAGUE: Visual Contexts Clarify Ambiguous Expressions". *in ICCV 2025* [code] [paper]

[3] Kwonho Kim, **Heejeong Nam**, Inwoo Hwang, Sanghack Lee."Towards Causal Representation Learning with Observable Sources as Auxiliaries". *ICML 2025 Workshop on Scaling Up Intervention Models*

[4] **Heejeong Nam**, Jihyun Kim, Jimin Yeom. (2024). "An Adversarial Approach to Irregular Time-Series Forecasting", *in NeurIPS 2024 Workshop on AdvML-Frontiers* [code] [paper]

[5] Joohyeong Lee, **Heejeong Nam**, Kwanhyeong Lee, Sangchul Hahn. (2024). "Compact and De-biased Negative Instance Embedding for Multi-Instance Learning on Whole-Slide Pathological Images", *in International Conference on Acoustics, Speech and Signal Processing (ICASSP)* [code] [paper]

[6] **Heejeong Nam**. (2023). "SCADI: Self-supervised Causal Disentanglement in Latent Variable Models", *in NeurIPS 2023 Workshop on Causal Representation Learning* [code] [paper]

[7] **Heejeong Nam**. (2023). "Enhanced Open Set Recognition via Disentangled Representation Learning", *in 4th Korea Artificial Intelligence Conference pp. 208-210* [code] [paper]

Experiences

BOEING | Seoul, South Korea Jan. 2024 ∼ Aug. 2025
Full-time employee, AI Researcher

Causality Lab | Seoul National University, South Korea Jun. 2024 ∼ Jan. 2025
Research Collaborator

linqalpha | Massachusetts, United States (remote) Sep. 2023 ∼ Dec. 2023
Internship, AI Researcher

AITRICS | Seoul, South Korea — Oct. 2022 ∼ Feb. 2023
Internship, AI Researcher

Vision Research Lab | UC Santa Barbara, United States — Jun. 2022 ∼ Sep. 2022
Internship, AI Researcher

Non-publication Projects

Accessibility Project (Realtime STT+T2TT) | **Boeing** — Mar. 2024 ∼ Aug. 2025

- Collaborated as one of three core developers—alongside the PI and the data scientist—serving as the primary AI engineer responsible for end-to-end model development.
- Highlighted at AIX 2025 [Articles] and AWG 2025, and the first Korean team featured in Boeing's public magazine.

Parts Sales Forecasting | **Boeing** — Jan. 2024 ∼ Aug. 2025

- Served as one of two core AI researchers driving the project development.
- Led the development of two customized internal time-series forecasting models, driving an overall performance improvement of approximately 20%.

Graph based Knowledge Editing in LLMs | **LinqAlpha** — Sep. 2023 ∼ Dec. 2023
(Advisor: Prof. Jy-Yong Sohn)

- Devised a test-time framework for editing LLM behavior by enforcing locality through demonstrations composed solely of target-relevant examples.
- Diagnosed reasoning weaknesses in state-of-the-art LLMs and augmented demonstrations with knowledge graph–derived context, significantly improving coverage and inference accuracy.

Brain CT Segmentation for NPH Prediction | **Vision Research Lab @ UCSB** — Jun. 2022 ∼ Sep. 2022
(Advisor: Prof. B.S. Manjunath)

- Assisted a real-time prediction project for Normal Pressure Hydrocephalus (NPH) on BisQue platform.
- Initiated a 5-class segmentation and a stable post-processing based on intensity difference that were introduced through morphology.

UCLA Timetable Recommender System | **UCLA** — Mar. 2022 ∼ Jun. 2022
(Advisor: Prof. Xiang "Anthony" Chen)

- Designed and implemented a web application that scrapes UCLA's course catalog and leverages TF–IDF similarity between a user's previous courses and course descriptions to generate personalized class recommendations.

Honors and Awards

Fulbright Scholarship — 2025
Awarded a prestigious U.S. government–funded program promoting academic and cultural exchange.

NeurIPS Conference Grant — 2023
Awarded full housing and registration fee support.

Jilli Scholarship — 2021
Awarded Yonsei University merit-based scholarship for academic excellence.

Yonsei Internal Scholarship — 2020
Awarded for outstanding leadership at Yonsei University.

Languages

Fluent in **English**: TOEFL IBT 114/120 (Nov. 2024)

Native in **Korean**