Youngeun Nam

Motto: "Irreplaceable" February 12, 2025

> Mobile: +82-10-9596-0615 E-mail: youngeun.nam@kaist.ac.kr

RESEARCH INTEREST

Data Analysis, Deep Learning, Generative Model, Anomaly Detection, Multi-Modal Learning, RAG

EDUCATION

Korea Advanced Institute of Science and Technology (KAIST)

Ph.D. in School of Computing

Mar. 2022 – *Feb.* 2026(expected)

Advisor: Jae-Gil Lee

Korea Advanced Institute of Science and Technology (KAIST)

M.S. in Industrial and System Engineering (Graduate School of Data Science)

Mar. 2020 – Feb. 2022

Advisor: Jae-Gil Lee

Pohang University of Science and Technology (POSTECH)

B.S. in Industrial and Management Engineering

Cum Laude

Mar. 2013 – Feb. 2017

PUBLICATIONS

Conferences

- [10] Bae, M., Shin, Y., **Nam, Y.**, Lee, Y., and Lee, J., "Semi-Supervised Learning for Time Series Collected at a Low Sampling Rate". Proceedings of the 30th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining (KDD), Barcelona, Spain, 2024.
- [9] **Nam, Y.**, Yoon, S., Shin, Y., Bae, M., Song, H., Lee, J., and Lee, B. S., "*Breaking the Time-Frequency Granularity Discrepancy in Time-Series Anomaly Detection*". International World Wide Web Conference (WWW), Singapore, Singapore, 2024.
- [8] Nam, Y., Trirat, P., Kim, T., Lee, Y., and Lee, J. "Context-Aware Deep Time-Series Decomposition for Anomaly Detection in Businesses". Proceedings of European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD), Torino, Italy, 2023.
- [7] Shin, H., Kang, J., Akbar, I., Choi, S., Nam, Y., Lee, J. "An Empirical Investigation of Deep Learning Models for Defect Classification in Solar Cells Electroluminescence". Korea Computer Congress, 2023.
- [6] {Trirat, P., Nam, Y.}, Kim, T., and Lee, J. "AnoViz: A Visual Inspection Tool of Anomalies in Multivariate Time Series". The Thirty-Seventh AAAI Conference on Artificial Intelligence (Demonstration Program), Washington, DC, 2023.
- [5] Kim, T., Bae, M., Jung, H., **Nam, Y.**, Shin, Y., Min, H. "User-Adaptive Ranking System on Mobile Trading Applications". Korea Computer Congress, 2022.

- [4] Kim, D., Min, H., Nam, Y., Song, H., Yoon, S., Kim, M., Lee, J. "COVID-EENet: Predicting Fine-Grained Impact of COVID-19 on Local Economies". The Thirty-Sixth AAAI Conference on Artificial Intelligence, Virtual Event, 2022.
- [3] Na, J., Kang, J., Bae, M., Nam, Y., Lee, J. "Vessel Trajectory Periodic Pattern Mining by Using AIS Data". Korea Computer Congress, 2021.
- [2] Nam, Y., Kang, J., Lee, J. "ActiveBoostThief: Model Extraction Attack Using Reliable Active Learning". Korea Computer Congress, 2021.
- [1] Kim, M., Kang, J., Kim, D., Song, H., Min, H., Nam, Y., Park, D. Lee, J. "Hi-COVIDNet: Deep Learning Approach to Predict Inbound COVID-19 Patients and Case Study in South Korea". Proceedings of the 26th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining (KDD), Virtual Event, California, 2020.

ACADEMIC EXPERIENCE

Advisor: Jae-Gil Lee

Research Internship	
Data Mining Lab	Seoul National University
Advisor: Sungzoon Cho	Aug. 2018 – Jul. 2018
Experience Design & Engineering Lab	POSTECH
Advisor: Sungho Han	Sep. 2015 – Dec. 2015
Activities	
Management Strategy Student Association (MSSA)	POSTECH
Sponsor: 3M Korea, POSCO	Sep. 2014 – Dec. 2016
Future Industrial Engineering Leaders and Dreamers (FIELD Camp)	Korea University
Competition Silver Award	Aug. 2014
International Conference for the Integration of Science, Technology and Society	KAIST
ICIST-KAIST Delegates	Aug. 2014
Teaching Assistant	
[CS360] Introduction to Database	KAIST
Advisor: Jae-Gil Lee	Sep. 2023 – Dec. 2023
[CS564] Data Science Methodology	KAIST
Advisor: Jae-Gil Lee	Mar. 2023 – Jun. 2023
(Outstanding Teaching Assistant Award)	
[CS564] Data Science Methodology	KAIST
Advisor: Jae-Gil Lee	Sep. 2022 – Dec. 2022
[CS492(D)] Special Topics in Computer Science <introduction data="" science="" to=""></introduction>	KAIST

Mar. 2022 – Jun. 2022

WORK EXPERIENCE

Data Analyst, Fitogether Inc.	Sep. 2018 – Nov. 2019
Software Engineer, Hyundai Autoever	Jan. 2017 – Dec. 2017
OTHER EXPERIENCE	
Mentor, Hyoam High School Program	Jul. 2021
SHOOTART Women's Futsal Club	Jan. 2017 – Present
SAMSUNG Dream Class Mentor	Jul. 2016 – Aug. 2016
RC Volunteers	Mar. 2016 – Dec. 2016
POSTECH Residential College Residential Advisor	Feb. 2016 – Dec. 2016
16 th LS University Students Overseas Volunteers	Jul. 2015 – Sep. 2015
Mentor, Hyoam High School Program	Jul. 2015
President of the Female Student Council	Jan. 2015 – Dec. 2015
Exchange Students, Korea National University of Arts	Jun. 2014, Dec. 2015
Busking (Keyboard) in Seoul	Jan. 2014
Hong Kong Toys & Games Fair 2013 Exhibitor	Jan. 2013
PROJECTS	
Research Projects	
Samsung Mobile Experience	KAIST
- Few-shot Anomaly Detection and Root Cause Estimation development	Jul. 2022 – Jul. 2023
Samsung Mobile Experience	KAIST
- Real-time service incident prediction development	Jun. 2021 – Jun. 2022
Samsung SDS	Seoul National University
- Storage-based platform model business idea research project	Aug. 2018 – Jul. 2016
- Platform proposal that provides new value to storage consumers	
Hyundai Card/Capital/Commercial	Hyundai Autoeve
- Hyundai Card/Capital/Commercial Blockchain Platform Construction and Service Task	Jun. 2017 – Dec. 2017
Course Projects	
[CS575] AI Ethics	KAIST
- Solving the Bias in Social Attitude Problem of News Recommendation System	Spring 2022
[CS470] Introduction to Artificial Intelligence	KAIST
- Unsupervised Anomaly Detection in Time Series with Temporal Context	Spring 2022
[CS570] Artificial Intelligence and Machine Learning	KAIST
- Time-series anomaly detection via multiresolution ensemble learning	Spring 2021
[KSE526] Analytical Methodologies for Big Data	KAIST
WAD A 1 14 C FOC 14 CODE 11 W. 1 C	E.11.202

- WAD: Anomaly detection for ECG data using CNN improved by Wavelet analysis

Fall 2020

- Black-box attack using active learning

Fall 2020

AWARDS AND HONORS

Outstanding Reviewer, KDD 2025 August	2024
Excellence in Character Scholarship, 2024 (₩1,000,000)	2024
Young-Han Kim Global Leader Scholarship, 2024 (₩4,000,000)	2024
School of Computing, KAIST, Outstanding Teaching Assistant Award, 2023 Spring	2023
The Thirty-Seventh AAAI Conference on Artificial Intelligence Scholarship, 2023 (\$500)	2023
Department of Industrial & Systems Engineering, KAIST, Scholarship, 2021 (₩1,000,000)	2021
FIELD Silver Award, Future Industrial Engineering Leaders and Dreamers Camp	2016

REVIEWER SERVICES

Program Committee

- ACM International World Wide Web Conference (WWW): 2024
- ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD): 2024
- Annual Conference on Neural Information Processing Systems (NeurIPS): 2024
- Asian Conference on Machine Learning Conference Track (ACML): 2024
- ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD): 2025 August
 - Recognized as an Outstanding Reviewer
- International Conference on Learning Representations (ICLR): 2025
- Artificial Intelligence and Statistics (AISTATS): 2025
- ACM International World Wide Web Conference (WWW): 2025

PROGRAMMING SKILLS

Python(Intermediate), R(Intermediate), Excel(Intermediate), C(Basic), C++(Basic), Java(Basic)