

Youngeun Nam

Motto: “Irreplaceable”

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RESEARCH INTEREST

Data Analysis, Machine Learning, Time Series, Anomaly Detection, Multi-Modal Learning, Networked TS

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

Mar. 2013 – Feb. 2017

Cum Laude

PUBLICATIONS

Conferences

[9] 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.

[8] **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.

[7] **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.

[6] 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.

[5] {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.

[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

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 to Data Science>

KAIST

Advisor: Jae-Gil Lee

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

16th 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
- Platform proposal that provides new value to storage consumers

Aug. 2018 – Jul. 2018

Hyundai Card/Capital/Commercial

Hyundai Autoever

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

Fall 2020

AWARDS AND HONORS

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

PROGRAMMING SKILLS

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