Youngeun Nam

Motto: "Irreplaceable" Jan 08, 2024

Mobile: +82-10-9596-0615

E-mail: youngeun.nam@kaist.ac.kr

RESEARCH INTEREST

Data Analysis, Machine Learning, Time Series, Anomaly Detection, Sports Data Analysis, 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

- [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. 2020.
- [2] Nam, Y., Kang, J., Lee, J. "ActiveBoostThief: Model Extraction Attack Using Reliable Active Learning". Korea Computer Congress. 2021.
- [3] Na, J., Kang, J., Bae, M., Nam, Y., Lee, J. "Vessel Trajectory Periodic Pattern Mining by Using AIS Data". Korea Computer Congress. 2021.
- [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. 2022.
- [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). 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.

[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). 2023.

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	
[CS492(D)] Special Topics in Computer Science <introduction data="" science="" to=""></introduction>	KAIST
Advisor: Jae-Gil Lee	Mar. 2022 – Jun. 2022
[CS564] Data Science Methodology	KAIST
Advisor: Jae-Gil Lee	Sep. 2022 – Dec. 2022
[CS564] Data Science Methodology	KAIST
Advisor: Jae-Gil Lee	Mar. 2023 – Jun. 2023
(Outstanding Teaching Assistant Award)	
[CS360] Introduction to Database	KAIST
Advisor: Jae-Gil Lee	Sep. 2023 – Dec. 2023
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. 2018
- Platform proposal that provides new value to storage consumers	
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
[CS548] Advanced Information Security	KAIST
- Black-box attack using active learning	Fall 2020
AWARDS AND HONORS	
School of Computing, KAIST, Outstanding Teaching Assistant Award, 2023	Spring 2023
The Thirty-Seventh AAAI Conference on Artificial Intelligence Scholarship,	•
Department of Industrial & Systems Engineering, KAIST, Scholarship, 2021	
Department of industrial & Systems Engineering, IXAIS1, Scholarshin, 2021	(** 1,000,000) 2021

PROGRAMMING SKILLS

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