# Nayeong Kim

## nayeong.kim@postech.ac.kr

Cheongam-Ro 77, POSTECH, Pohang-Si, Republic of Korea (37673)

#### **EDUCATION**

POSTECH Pohang, Republic of Korea

Ph.D. in Computer Science and Engineering (Unified master's and doctor's course)

Sep. 2017 - current

- Supervised by Prof. Suha Kwak in the Computer Vision Lab.
- Research Interest: Algorithmic fairness and Debiasing

POSTECH Pohang, Republic of Korea Mar. 2013 - Aug. 2017

B.S. in Computer Science and Engineering

#### Publication

- [1] Nam Hyeon-Woo, Moon Ye-Bin, Wonseok Choi, Nayeong Kim, Suha Kwak, Tae-Hyun Oh. "Exploiting Synthetic Data for Data Imbalance Problems: Baselines from a Data Perspective", ICCV workshop on MMFM: What is Next in Multimodal Foundation Models?, 2023.
- [2] Nayeong Kim, Juwon Kang, Sungsoo Ahn, Jungseul Ok, Suha Kwak. "Removing Multiple Biases through the Lens of Multi-task Learning", ICML workshop on Spurious Correlations, Invariance, and Stability (SCIS), 2023.
- Juwon Kang, Nayeong Kim, Donghyeon Kwon, Jungseul Ok, Suha Kwak. "Leveraging Proxy of Training Data for Test-Time Adaptation", International Conference on Machine Learning (ICML), 2023.
- [4] Nayeong Kim, Sehyun Hwang, Sungsoo Ahn, Jaesik Park, Suha Kwak, "Learning Debiased Classifier with Biased Committee", Conference on Neural Information Processing Systems (NeurIPS), 2022.
- [5] Nayeong Kim, Suha Kwak. "Robust Crowd Counting via Image Enhancement and Dynamic Feature Selection", British Machine Vision Conference (BMVC), 2021.

# Awards

BK21 Best Paper Award from POSTECH CSE, "Learning Debiased Classifier with Biased Committee" 2023
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# Reviewing services

International Conference on Learning Representations (ICLR)	2024
AAAI Conference on Artificial Intelligence (AAAI)	2024
Winter Conference on Applications of Computer Vision (WACV)	2024
Conference on Neural Information Processing Systems (NeurIPS)	2023
International Conference on Computer Vision (ICCV)	2023
Tiny Papers at International Conference on Learning Representations (ICLR)	2023
International Conference on Machine Learning (ICML)	2022

#### Talks

"Learning Debiased Classifier with Biased Committee", Korean Artificial Intelligence Association Fall conference, NAVER and KAIA, Nov. 2022

## TEACHING EXPERIENCE

Teaching Assistant, DeepLearning, POSTECH	Mar. 2020 - Jun. 2020
Teaching Assistant, DeepLearning:NUGU-based AI Tech&Serv., POSTECH	Sep. 2018 - Dec. 2018
Teaching Assistant, Machine Learning Course, SK Hynix	Aug. 2018 - May. 2019
Teaching Assistant, Deep Learning Course, POSCO Group	May. 2018 - Jul. 2019
Teaching Assistant, Introduction to Machine Learning, POSTECH	Mar. 2018 - Jun. 2018
Teaching Assistant, Machine Learning Course, Samsung	Feb. 2018 - Mar. 2019
Teaching Assistant, AI Job Training Course, POSTECH Institute of AI	Dec. 2017 - Apr. 2019

# WORK EXPERIENCE

Research Intern at Samsung Electronics	Jan. 2018 - Feb. 2018
Research Intern at Exem	Mar 2017 - Sep. 2017
Undergraduate Intern at POSTECH Machine Learning Group	Mar. 2016 - Aug. 2017

# COLLABORATION PROJECTS

# Electronics and Telecommunications Research Institute (ETRI)

May. 2020 – Present

• Adaptive AI for Robots. Developed neural networks for crowd recognition in single image.

POSCO group

Sep. 2018 – Sep. 2019

• Anomaly detection for information leakage according to external intrusion attack using deep neural networks

# Samsung Electronics

Jan. 2018 - Jul. 2018

• Developing abnormal signal detection algorithm for semiconductor process equipment using recurrent neural network