SohyunLee

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EDUCATION —

POSTECH | *Integrated M.S.* · *Ph.D.*

Sep. 2020 - Present

- Graduate School of Artificial Intelligence
- Supervised by Prof. Suha Kwak in the Computer Vision Lab.

POSTECH $\mid B.S.$

March 2015 - Aug. 2020

Mechanical Engineering

EXPERIENCE —

Visiting Researcher | Tübingen Al Center, University of Tübingen

Mar. 2024 - May 2024

• Host: Prof. Seong Joon Oh

Undergraduate Intern | Innovative Medical Solution Lab, POSTECH

June 2019 - Sep. 2019

· Researched on mental stress detection.

Undergraduate Intern | *Industrial AI Lab, POSTECH*

June 2018 - June 2019

• Researched on lesion detection in capsule endoscopy.

Engineering Intern | Doosan Heavy Industries

June 2017 - July 2017

• Designed a gas turbine compressor.

PUBLICATIONS —

- [1] **Sohyun Lee**, Namyup Kim, Sungyeon Kim, and Suha Kwak *FREST: Feature RESToration for Semantic Segmentation under Multiple Adverse Conditions* European Conference on Computer Vision (**ECCV**), 2024
- [2] Sehyun Hwang, **Sohyun Lee**, Hoyoung Kim, Minhyeon Oh, Jungseul Ok, and Suha Kwak *Active Learning for Semantic Segmentation with Multi-class Label Query* Conference on Neural Information Processing Systems (**NeurIPS**), 2023
- [3] **Sohyun Lee***, Jaesung Rim*, Boseung Jeong, Geonu Kim, ByungJu Woo, Haechan Lee, Sunghyun Cho, and Suha Kwak (*equal contribution)

 Human Pose Estimation in Extremely Low-light Conditions

 IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**), 2023
- [4] Sehyun Hwang, **Sohyun Lee**, Sungyeon Kim, Jungseul Ok, and Suha Kwak *Combating Label Distribution Shift for Active Domain Adaptation* European Conference on Computer Vision (**ECCV**), 2022
- [5] Sohyun Lee, Taeyoung Son, and Suha Kwak FIFO: Learning Fog-invariant Features for Foggy Scene Segmentation IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2022 (Best Paper Finalist, Oral Presentation)
- [6] Juwon Kang, **Sohyun Lee**, Namyup Kim, and Suha Kwak Style Neophile: Constantly Seeking Novel Styles for Domain Generalization IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**), 2022

ACADEMIC SERVICES -

• Journal Reviewer: TPAMI

Conference Reviewer: ICLR (2024), NeurIPS (2023-2024), ICCV (2023), CVPR (2022-2024), ECCV (2022-2024), WACV (2023)

 FIFO: Learning Fog-invariant Features for Foggy Scene Segmentation, Vision for all Seasons workshop in CVPR, New Orleans, 2022

HONORS & AWARDS -

- CVPR Best Paper Finalist, 2022
 - Awarded to Top 0.4% (33 of 8161 papers)
 - FIFO: Learning Fog-invariant Features for Foggy Scene Segmentation
- Qualcomm Innovation Fellowship Winner (3 times), Qualcomm Korea Corp., 2022
 - FIFO: Learning Fog-invariant Features for Foggy Scene Segmentation (CVPR 2022, Best Paper Finalist)
 - Style Neophile: Constantly Seeking Novel Styles for Domain Generalization (CVPR 2022)
 - Combating Label Distribution Shift for Active Domain Adaptation (ECCV 2022)
- Excellence Prize at BK21 Best Paper Award, POSTECH GSAI, 2024
- POSTECHIAN fellowship awards, POSTECH, 2023
- Excellence Award at 3rd POSTECH Research Performance Contest, POSTECH, 2023
- Grand Prize at BK21 Best Paper Award, POSTECH GSAI, 2023
- Gold Prize at IPIU Best Paper Award, 2022
- POSTECH Creative Self-Research Scholarship, 2020

PRESS -

- April 28, 짙은 안개 껴도 사람·사물 뚜렷이 식별하는 Al 개발, 동아사이언스
- April 28, 짙은 안개 속에서도 외부환경 정확히 인식하는 AI 개발, 매일경제
- April 28, 한치 앞도 안 보이는 안개 속에서도 문제없는 자율주행차 나온다, 서울신문
- April 28, 자율주행車 상용화 앞당긴다...포스텍 연구진, 안개에도 정확한 영상인식 AI기술 개발, 영남일보
- April 28, 포스텍 곽수하 교수팀 안개 낀 날에도 정확히 동작하는 영상인식 AI 기술 개발, 뉴스1
- April 28, 안개 낀 날씨에도 정확히 작동 영상인식 AI 개발, YTN사이언스