# Sohyun Lee

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#### **EDUCATION**

POSTECH

Pohang, South Korea

September 2020 - Present

Integrated M.S. · Ph.D. in Artificial Intelligence

- Supervised by Prof. Suha Kwak in the Computer Vision Lab.
- Research Interest: robust recognition in adverse visual conditions, domain adaptation, domain generalization.

#### POSTECH

Pohang, South Korea March 2015 - Aug. 2020

B.S. in Mechanical Engineering

### **PUBLICATIONS**

International

- [1] 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
- [2] 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
- [3] 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
- [4] 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)
- [5] 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

#### Domestic

- [1] **Sohyun Lee**, Taeyoung Son, and Suha Kwak 안개가 낀 장면의 의미론적 분할을 위한 안개에 불변하는 특징 학습 Workshop for Image Processing and Image Understanding (IPIU), 2022
- [2] Juwon Kang, **Sohyun Lee**, Namyup Kim, and Suha Kwak 지속적인 새로운 스타일 생성을 통한 도메인 일반화 방법
  Workshop for Image Processing and Image Understanding (IPIU), 2022
- [3] Sehyun Hwang, **Sohyun Lee**, Sungyeon Kim, Jungseul Ok, and Suha Kwak 오프라인 능동 도메인 적응 학습
  Workshop for Image Processing and Image Understanding (IPIU), 2022

#### Professional Services

- Reviewer, IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
- Reviewer, International Conference on Learning Representations (ICLR), 2024
- Reviewer, Conference on Neural Information Processing Systems (NeurIPS), 2023
- Reviewer, International Conference on Computer Vision (ICCV), 2023
- Reviewer, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2022-2023
- Reviewer, IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), 2023
- Reviewer, Asian Conference on Computer Vision (ACCV), 2022
- Reviewer, European Conference on Computer Vision (ECCV), 2022

#### INVITED TALK

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

#### Press

- April 28, 짙은 안개 껴도 사람·사물 뚜렷이 식별하는 AI 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

## AWARDS

- 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
- Qualcomm Innovation Fellowship 2022 Winner, 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)
- CVPR Best Paper Finalist, 2022
  - Awarded to Top 0.4% (33 of 8161 papers)
  - FIFO: Learning Fog-invariant Features for Foggy Scene Segmentation
- Gold Prize at IPIU Best Paper Award, 2022
- POSTECH Creative Self-Research Scholarship, 2020