

Sehyun Hwang

Computer Vision Laboratory, POSTECH, 77 Cheongam-ro, Pohang, Geongbuk, South Korea 37673

✉ sehyun03@postech.ac.kr | 🏠 sehyun03.github.io | 🎓 Google Scholar

Education

POSTECH (Pohang University of Science and Technology)

INTEGRATED M.S · PH.D STUDENT IN COMPUTER SCIENCE AND ENGINEERING

- Advisor: Prof. Suha kwak
- Cumulative GPA: 4.0 / 4.3

Pohang, South Korea

Sep. 2018 - Feb. 2025

DGIST (Daegu Gyeongbuk Institute of Science and Technology)

B.S. IN SCHOOL OF UNDERGRADUATE STUDIES

- Cumulative GPA: 3.9 / 4.3

Daegu, South Korea

Mar. 2014 - Sep. 2018

Experience

Computer Vision Lab, POSTECH

POSTDOCTORAL RESEARCHER

- Conduct research on efficient image tokenization for compact and discrete visual representations.

Pohang, South Korea

Feb. 2025 - May. 2025

Health Futures Team, Microsoft Research Lab Cambridge

RESEARCH INTERN

- Mentor: Maximilian Ilse
- Participate in research projects about tube segmentation on chest X-ray.

Cambridge, UK

Jul. 2024 - Sep. 2024

Scalable Trustworthy AI Lab, University of Tübingen

VISITING RESEARCHER

- Inviter: Prof. Seong Joon Oh
- Participate in research projects about active learning for OOD.

Tübingen, Germany

Mar. 2024 - May. 2024

Computer Vision Lab, POSTECH

RESEARCH ASSISTANT

- Participate in research projects about active learning.

Pohang, South Korea

Mar. 2018 - Feb. 2025

Optical Fiber Sensor Group, Nanyang Technological University (NTU)

RESEARCH INTERNSHIP

- Advisor: Prof. Chi Chiu Chan.
- A Study on Glucose and Gas Detection Sensor using Optical Fiber.

Singapore

June. 2016 - August. 2016

Computational Material Design Lab, DGIST

RESEARCH INTERNSHIP

- Advisor: Prof. Joongoo Kang.
- A Theoretical modeling on Carbon nanotube, Graphene based on quantum mechanics.

Daegu, South Korea

Jun. 2015 - July. 2015

Publication

• Enhancing Cost Efficiency in Active Learning with Candidate Set Query

2025

YEHO GWON*, SEHYUN HWANG*, HOYOUNG KIM, JUNGSEUL OK, AND SUHA KWAK (*EQUAL CONTRIBUTION)
Transactions on Machine Learning Research (TMLR)

• Active Label Correction for Semantic Segmentation with Foundation Models

2024

HOYOUNG KIM, SEHYUN HWANG, SUHA KWAK, AND JUNGSEUL OK
International Conference on Machine Learning (ICML)

- Extreme Point Supervised Instance Segmentation** 2024
 HYEONJUN LEE, SEHYUN HWANG, AND SUHA KWAK
IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
- Active Learning for Semantic Segmentation with Multi-class Label Query** 2023
 SEHYUN HWANG, SOHYUN LEE, HOYOUNG KIM, MINHYEON OH, JUNGSEUL OK, AND SUHA KWAK
Neural Information Processing Systems (NeurIPS)
- Adaptive Superpixel for Active Learning in Semantic Segmentation** 2023
 HOYOUNG KIM, MINHYEON OH, SEHYUN HWANG, JUNGSEUL OK, AND SUHA KWAK
International Conference on Computer Vision (ICCV)
- Learning Debiased Classifier with Biased Committee** 2022
 NAYEONG KIM, SEHYUN HWANG, SUNGSOO AHN, JAESIK PARK, AND SUHA KWAK
Conference on Neural Information Processing Systems (NeurIPS)
- Combating Label Distribution Shift for Active Domain Adaptation** 2022
 SEHYUN HWANG, SOHYUN LEE, SUNGYEON KIM, JUNGSEUL OK, AND SUHA KWAK
European Conference on Computer Vision (ECCV)
- Learning to Detect Semantic Boundaries with Image-Level Class Labels** 2022
 NAMYUP KIM*, SEHYUN HWANG*, AND SUHA KWAK (*EQUAL CONTRIBUTION)
International Journal of Computer Vision (IJCV)

Fellowships and Awards

2025	Excellence Award at BK21 Paper Award , POSTECH GSAI	Pohang, S. Korea
2024	Best Award at BK21 Paper Award , POSTECH GSAI	Pohang, S. Korea
2023	POSTECHIAN Fellowship Award , POSTECH	Pohang, S. Korea
2023	Excellence Award at BK21 Paper Award , POSTECH CSE	Pohang, S. Korea
2022	Qualcomm Innovation Fellowship South Korea , Qualcomm	Seoul, S. Korea
2022	Gold Prize at IPIU Best Paper Award , IPIU	Jeju, S. Korea
2020	The Honorable Mention, Samsung Humantech Thesis Prize , Samsung Electronics	Suwon, S. Korea
2016	Academic Excellence Scholarship , DGIST	Daegu, S. Korea

Reviewer Service

- IEEE Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**)
- Conference on Computer Vision and Pattern Recognition (**CVPR**): 2023-2025
- International Conference on Learning Representations (**ICLR**): 2025
- International Conference on Machine Learning (**ICML**): 2024-2025
- International Conference on Computer Vision (**ICCV**): 2023, 2025
- European Conference on Computer Vision (**ECCV**): 2024
- Conference on Neural Information Processing Systems (**NeurIPS**): 2023
- Asian Conference on Computer Vision (**ACCV**): 2024

Teaching Experience

- Teaching Assistant in External Courses**
 SK Hynix, Machine Learning Training Course (Nov. 2019)
- Teaching Assistant in POSTECH**
 CSED261, Discrete Math. for Computer Science (Spring 2021)
 AIGS538, Deep Learning (Spring 2021)
 AIGS539, Computer Vision (Fall 2021)