

# Namyup Kim

PH.D. STUDENT @ COMPUTER VISION LAB.

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## Education

### Pohang University of Science and Technology (POSTECH)

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

- Advisor: Prof. Suha Kwak
- Cumulative GPA: 3.8 / 4.3

Pohang, South Korea

Mar. 2018 - Present

### Soongsil University

B.S. IN ELECTRONIC ENGINEERING

- Advisor: Prof. Dongsung Kim
- Cumulative GPA: 4.1 / 4.5

Seoul, South Korea

Mar. 2011 - Feb. 2018

## Publication

- **FREST: Feature Restoration for Semantic Segmentation under Multiple Adverse Conditions** 2024  
SOHYUN LEE, NAMYUP KIM, SUNGYEON KIM, AND SUHA KWAK  
European Conference on Computer Vision (ECCV)
- **Shatter and Gather: Learning Referring Image Segmentation with Text Supervision** 2023  
DONGWON KIM\*, NAMYUP KIM\*, CUILING LAN, AND SUHA KWAK (\*EQUAL CONTRIBUTION)  
IEEE/CVF International Conference on Computer Vision (ICCV)
- **Improving Cross-Modal Retrieval with Set of Diverse Embeddings** 2023  
DONGWON KIM, NAMYUP KIM, AND SUHA KWAK  
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) (**Highlight, 235/9155 = 2.5**)
- **WEDGE: Web-Image Assisted Domain Generalization for Semantic Segmentation** 2023  
NAMYUP KIM, TAEYOUNG SON, JAEHYUN PAHK, CUILING LAN, WENJUN ZENG, AND SUHA KWAK  
IEEE International Conference on Robotics and Automation (ICRA)
- **ReSTR: Convolution-free Referring Image Segmentation Using Transformers** 2022  
NAMYUP KIM, DONGWON KIM, CUILING LAN, WENJUN ZENG, AND SUHA KWAK  
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)
- **Style Neophile: Constantly Seeking Novel Styles for Domain Generalization** 2022  
JUWON KANG, SOHYUN LEE, NAMYUP KIM, AND SUHA KWAK  
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)
- **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)
- **Urie: Universal image enhancement for visual recognition in the wild** 2020  
TAEYOUNG SON, JUWON KANG, NAMYUP KIM, SUNGHYUN CHO, AND SUHA KWAK  
European Conference on Computer Vision (ECCV)

## Experience

### Tübingen AI Center, University of Tübingen

VISITING RESEARCHER

- Host: Prof. Seong Joon Oh

Tübingen, Germany

Mar. 2024 - Present

### Microsoft Research Asia (MSRA), Remote

RESEARCH INTERN

- Researched on domain generalization for semantic segmentation and referring image segmentation.
- Mentor: Dr. Cuiling Lan

Beijing, China

Dec. 2020 - Jun. 2021

## Computer Vision Lab, POSTECH

RESEARCH ASSISTANT

- Participate in research projects about weakly supervised semantic boundary detection and domain generalization.

Pohang, South Korea

Mar. 2018 - Present

## Image Processing Lab, Soongsil University

RESEARCH INTERN

- Developed software applications including automatic attendance, hidden camera detection and text contents/buttons rendering on a bird-eye view image

Seoul, South Korea

Mar. 2016 - Feb. 2018

## Software Maestro (funded by Korea Ministry of Knowledge and Economy)

SOFTWARE ENGINEER TRAINEE

- Trainee completion: Built a system of detecting and reporting hidden cameras which is composed of app, detecting hardware and an announcement webpage.

Seoul, South Korea

Jul. 2017 - Dec. 2017

## EF International Language Centres

LANGUAGE STUDY ABROAD

- Certificated of academic year abroad diploma.

Bristol, UK

Jan. 2015 - Nov. 2015

## Patent

### Input and Output System of Text According to Position on Image and the Method Thereof

2018

NAMYUP KIM\*, DONGWOO KIM, JIYOUNG YEON, HONGSUN YUN

Korean Patent, KR1018284400000

## Honors & Awards

2022 NAVER Ph.D. Fellowship Award, NAVER

Seoul, S. Korea

2022 POSTECHIAN Fellowship Award, POSTECH

Seoul, S. Korea

2022 Qualcomm Innovation Fellowship South Korea, Qualcomm

Seoul, S. Korea

2022 The 2<sup>nd</sup> and 3<sup>rd</sup> Prize, NAVER × POSTECH AI DAY, NAVER

Pohang, S. Korea

2020 The Honorable Mention, Samsung Humantech Paper Award, Samsung Electronics

Suwon, S. Korea

2016 The Grand Prize, The 14<sup>th</sup> Embedded Software Contest, Ministry of Trade Industry and Energy

Seoul, S. Korea

2016 The Bronze Prize, Engineering Design Competition, Soongsil University

Seoul, S. Korea

## Reviewer

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

## Invited Talk

### Open Seminar: An Introduction of Referring Image Segmentation and its Recent Work

Pankyo, South Korea

KAKAO BRAIN

Jul. 2022

## Teaching Experience

### Teaching Assistant in External Courses

SK Hynix, Machine Learning Training Course (Nov. 2019)

### Teaching Assistant in POSTECH

CSED290, Introduction to Computer Science & Engineering (Spring 2018)

CSED261, Discrete Mathematics for Computer Science (Spring 2022)