

#### Ph.D. Student @ Computer Vision Lab.

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

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Pohang, South Korea

Mar. 2018 - Present

Mar. 2018 - Present

# Education

RESEARCH ASSISTANT

and domain generalization.

Pohang University of Science and Technology (POSTECH)

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

| <ul> <li>Advisor: Prof. Suha Kwak</li> <li>Cumulative GPA: 3.8 / 4.3</li> </ul>   | mur. 2018 - Present                         |
|---|---|
| Soongsil University  B.S. IN ELECTRONIC ENGINEERING  • Advisor: Prof. Dongsung Kim  • Cumulative GPA: 4.1 / 4.5   | Seoul, South Korea<br>Mar. 2011 - Feb. 2018 |
| Publication   |   |
| • Shatter and Gather: Learning Referring Image Segmentation with Text Supervision Dongwon Kim*, Namyup Kim*, Cuiling Lan, and Suha Kwak (*Equal contribution)  IEEE/CVF International Conference on Computer Vision (ICCV)    | 2023  |
| • Improving Cross-Modal Retrieval with Set of Diverse Embeddings  Dongwon Kim, Namyup Kim, and Suha Kwak  IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) (Highlight, 235/9155 = 2.5)                   | 2023  |
| • WEDGE: Web-Image Assisted Domain Generalization for Semantic Segmentation  Namyup Kim, Taeyoung Son, Jaehyun Pahk, Cuiling Lan, Wenjun Zeng, and Suha Kwak  IEEE International Conference on Robotics and Automation (ICRA) | 2023  |
| ReSTR: Convolution-free Referring Image Segmentation Using Transformers     Namyup Kim, Dongwon Kim, Cuiling Lan, Wenjun Zeng, and Suha Kwak     IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)        | 2022  |
| • Style Neophile: Constantly Seeking Novel Styles for Domain Generalization Juwon Kang, Sohyun Lee, Namyup Kim, and Suha Kwak IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)                           | 2022  |
| • Learning to Detect Semantic Boundaries with Image-Level Class Labels  Namyup Kim*, Sehyun Hwang*, and Suha Kwak (*equal contribution)  International Journal of Computer Vision (IJCV)                                      | 2022  |
| • Urie: Universal image enhancement for visual recognition in the wild Taeyoung Son, Juwon Kang, Namyup Kim, Sunghyun Cho, and Suha Kwak European Conference on Computer Vision (ECCV)  | 2020  |
| Experience  |   |
| Microsoft Research Asia (MSRA), Remote RESEARCH INTERN  Researched on domain generalization for semantic segmentation and referring image segmentation.  Mentor: Cuiling Lan  | Beijing, China<br>Dec. 2020 - Jun. 2021     |
| Computer Vision Lab, POSTECH  | Pohang, South Korea                         |

• Participate in research projects about weakly supervised semantic boundary detection

#### 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

Jan. 2013 - Oct. 2014

## 5<sup>th</sup> Corps Headquarters

MILITARY OBLIGATION

• Carried out the obligatory duty of national defense.

Pocheon, South Korea

## **Patent**

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

2018

 $\underline{\mathsf{Namyup}\,\mathsf{Kim}}^*$ , 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, POSETCH  | Seoul, S. Korea  |
| 2022  | Qualcomm Innovation Fellowship South Korea , Qualcomm   | Seoul, S. Korea  |
| 2022  | The $2^{nd}$ and $3^{rd}$ Prize, NAVER $	imes$ POSTECH AI DAY , NAVER   | Pohang, S. Korea |
| 2020  | The Honorable Mention, Samsung Humantech Thesis Prize, Samsung Electronics                                    | Suwon, S. Korea  |
| 2016  | <b>The Grand Prize, The 14<sup>th</sup> Embedded Software Contest</b> , Ministry of Trade Industry and Energy | Seoul, S. Korea  |
| 2016  | The Bronze Prize, Engineering Design Competition, Soongsil University   | Seoul, S. Korea  |
| 2011, | 2012, 2017 Academic Excellence Scholarship , 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
- Conference on Neural Information Processing Systems (NeurIPS): 2023
- 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

#### Invited Talk

• Open Seminar: An Introduction of Referring Image Segmentation and its Recent Work
KAKAO BRAIN

Pankyo, South Korea

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)