

Byeonghyun Pak

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Education

Daegu Gyeongbuk Institute of Science and Technology (DGIST)

Bachelor of Science in Engineering

GPA: 3.84/4.3 (95.4/100, 145 credits)

Mar 2019 - Feb 2023

Daegu, South Korea

Publications

1. **Textual Query-Driven Mask Transformer for Domain Generalized Segmentation** [paper]

*Byeonghyun Pak**, *Byeongju Woo**, *Sunghwan Kim**, *Dae-hwan Kim*, *Hoseong Kim*

European Conference on Computer Vision (ECCV), 2024

2. **B-spline Texture Coefficients Estimator for Screen Content Image Super-Resolution** [paper]

*Byeonghyun Pak**, *Jaewon Lee**, *Kyong Hwan Jin*

Computer Vision and Pattern Recognition (CVPR), 2023 (Highlight)

Work Experience

Agency for Defense Development (ADD)

Research Officer for National Defense (ROND)

Mar 2024 - Present

Daejeon, South Korea

- Selected as one of 20 officers in Korea specializing in science and technology research for national defense.
- Developed robust vision systems for defense, including object detection in infrared imagery for UAVs.
- Researched domain generalization in ML models for reliable performance under OOD conditions [ECCV '24].

Image Processing Laboratory @ DGIST

Undergraduate Research Intern

Dec 2021 - Feb 2023

Daegu, South Korea

- Supervised by Prof. Kyong Hwan Jin.
- Conducted research on single image super-resolution using image neural fields [CVPR '23].

Honor & Awards

Korea National Scholarship of Excellence in Science and Technology

- Awarded \$15,700 (Full-Ride) for ROND Candidates.

Mar 2021 - Feb 2022

National Scholarship for Undergraduate Study

- Awarded \$16,000 (Full-Tuition)

Mar 2019 - Feb 2023

Korea Military Academy Superintendent's Award

- Award for Excellence among 6 National Defense Research Projects.

Dec 2021

Skills

Programming Languages: Python, C/C++, JavaScript, MATLAB

Frameworks & Tools: Pytorch, Tensorflow, NumPy, OpenCV, Docker, Git

Certificate: Engineer Big Data Analysis (Date of Acquisition: Jul 2024)

References

Prof. Kyong Hwan Jin, Associate Professor at Korea Univ.

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Dr. Eunjin Koh, Principal Researcher at ADD

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Dr. Hoseong Kim, Senior Researcher at ADD

Email: hoseongkim@add.re.kr