



Donggeon Bae

Undergraduate Student

School of Electrical and Electronic Engineering
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Nationality & Languages

Republic of Korea
Korean & English

► English Proficiency
OPIc: IH (Intermediate High)

Education

2018.03 – Present **B.S. in Electrical and Electronic Engineering**
Yonsei University

Research Interests

Computer Vision / Computational Imaging / Biophotonics

Experiences

(2020.01 – Present) **Undergraduate Researcher, Optical Imaging Systems Laboratory (OISL) in Yonsei University (Advisor: Prof. Seung Ah Lee)**

Detailed Achievements:

- Lensless Imaging
 - Deep Learning for Image Reconstruction
 - Deep Learning for Comprehensive Lensless Forward Modeling
- Laser Speckle Imaging

(2022.07 – 2023.01) **Researcher, Yonsei Artificial Intelligence, On/Offline**

(2021.07 – 2021.12) **Researcher, Yonsei Artificial Intelligence, Online**

Detailed Achievements:

- Demanding Dataset Generation
- Cell Segmentation
- Deep Learning Methods for Medical Diagnosis

(2020.11 – 2022.05) **Military Service in Korea Following Obligation**

Publications

1. “Lensless Imaging with an End-to-End Deep Neural Network”
Donggeon Bae, Jaewoo Jung, Nakkyu Baek and Seung Ah Lee

Conference (selected)

2020, Oral, IEEE/IEIE ICCE-ASIA
Donggeon Bae, Jaewoo Jung, Nakkyu Baek and Seung Ah Lee, “*Lensless Imaging with an End-to-End Deep Neural Network*”

2021, Poster, Optics and Photonics Congress

Jaewoo Jung, Tae Young Kim, **Donggeon Bae**, Ernest K. Ryu and Seung Ah Lee, "*Unrolled ADMM for Image Reconstruction in Lensless Cameras*"

2021, Oral, IEEE/IEIE ICCE-ASIA

Jaewoo Jung, Tae Young Kim, **Donggeon Bae**, Ernest K. Ryu and Seung Ah Lee, "*Image Reconstruction in Lensless Cameras with Unrolled Optimization Algorithms*"

2022, Poster, Gordon Research Conference Image Science

Jaewoo Jung, **Donggeon Bae**, Kyungchul Lee, Nakkyu Baek, Ernest K. Ryu and Seung Ah Lee, "*Deep Learning Approaches for Image Reconstruction in Lensless Cameras*"

2022, Oral, IEEE Region 10 Conference

Jaewoo Jung, Tae Young Kim, **Donggeon Bae**, Ernest K. Ryu and Seung Ah Lee, "*Image Reconstruction in Lensless Cameras with Unrolled Optimization Algorithms*"

Research Techniques

► **Computer Skills**

Python, C/C++, MATLAB, Linux, Raspberry Pi

► **Machine Learning**

Pytorch, Keras, Tensorflow

Personal Interests

Poetry, billiard
