

# Sibaek Lee (Minjae Lee)

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## Contact information

- Combined MS-Phd students in the Laboratory of Artificial Intelligence and Robotics (LAIR)
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## Education

- 2024.03 - Present : M.S. & Ph.D. in School of **Intelligent Robots** at Sungkyunkwan University (SKKU)
- 2023.03 - 2024.02 : M.S. & Ph.D. in School of **Artificial Intelligence** at Ulsan National Institute of Science and Technology (UNIST)
- 2016.03 - 2023.02 : B.S. major in School of **Computer Science** and minor in **Mechanical Engineering** at Ulsan National Institute of Science and Technology (UNIST)

## Research interests

- **Deep Learning**: 3D vision, Language model, Bayesian learning, Generative model
- **Robotics**: Simultaneous Localization and Mapping (SLAM), Robot Perception, Adaptive Robot

## Publications

- **Bayesian NeRF: Quantifying Uncertainty with Volume Density in Neural Radiance Fields**  
Sibaek Lee, Kyeongsu Kang, Hyeonwoo Yu  
(arxiv), 2024  
[\[Paper\]](#) [\[Code\]](#) [\[Video\]](#)
- **Just Flip: Flipped Observation Generation and Optimization for Neural Radiance Fields to Cover Unobserved View**  
Minjae Lee, Kyeongsu Kang, Hyeonwoo Yu  
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2024 (**Oral pitch & interactive presentation**)  
[\[Paper\]](#) [\[Code\]](#) [\[Video\]](#)
- **Necessity Feature Correspondence Estimation for Large-scale Global Place Recognition and Relocalization**  
Kyeongsu Kang, **Minjae Lee**, Hyeonwoo Yu

(arxiv), 2023

[[Paper](#)] [[Code](#)]

- **Literature review on Transformers in object detection**  
Elkhan Ismayilzada, **Minjae Lee** and Seungryul Baek  
Korean Artificial Intelligence Association (CKAIA), 2022
- **Free-form masked facial image inpainting via exploiting 2D and 3D information**  
Jihyeon Kim, Junuk Cha, Yeongjun Choo, **Minjae Lee**, Jitae Yoo, Yeonghun Oh, Hoseong Cho, Eunseo Kim, Chungseok Choi, Honggyu Lim, Donguk Min1, Eugene Shin, Seokun Kang and Seungryul Baek  
Korean Artificial Intelligence Association (CKAIA), 2022

## Work Experience

- 2024.08 (Expected) - : 3D Vision & Deep Learning Research Intern at [Naver Labs](#)
- 2024.03 - Present : Research Intern at Artificial Intelligence and Robotics Lab (SKKU)  
Supervisor : [Hyeonwoo Yu](#)
- 2022.08 - 2024.02 : Research Intern at Artificial Intelligence and Robotics Lab (UNIST)  
Supervisor : [Hyeonwoo Yu](#)
- 2021.06 - 2022.07 : Research Intern at Applied Cryptography Lab (UNIST)  
Supervisor: [Miran Kim](#)

## Conference Review

- IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2024
- IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2023

## Presentation

- Korean Artificial Intelligence Association (CKAIA) Poster Session "Literature review on Transformers in object detection" (2022.11.18)
- UNIST Artificial Intelligence Challengers Program (AICP) Poster Session "Just Flip" (2023.11.14)
- LG DX Intensive Course, "Privacy-Preserving Machine Learning" (2022.08.03)
- LG DX Intensive Course, "Computer Vision" (2022.07.14)
- LG DX Intensive Course, "Privacy-Preserving Machine Learning" (2021.10.22)

## Languages

- Korean: Native ★★★★★

- English: Professional ★★★★★☆