Seokjun Choi

Contact Information

LinkedIn: https://www.linkedin.com/in/seokjun-choi-734587190
Github: https://github.com/MichaelCSJ
Cell: +82-10-3314-4139
E-mail: seokjun@postech.ac.kr

Citizenship

Republic of Korea

Research Interests

Computational Illumination, Optics, Inverse Rendering

Education

POSTECH, Pohang University of Science and Technology, Pohang, Korea.
Ph.D. Student. Advisor **Seung-Hwan Baek**

The Department of Computer Science and Engineering,

Feb. 2022 - Now

Chung-Ang University, Seoul, Korea. The Degree of Bachelor of Engineering in

School of Integrative Engineering,

School of Software,

Feb. 2015 - Aug. 2021

- GPA: 4.11/4.5 (MAGNA CUM LAUDE)

Publications

Seokjun Choi, Seungwoo Yoon, Giljoo Nam, Seungyong Lee and Seung-Hwan Baek "Differentiable Display Photometric Stereo", *The IEEE/CVF Conference on Computer Vision and Pattern Recognition 2024(**CVPR 2024**).*

Hoon-Gyu Chung, **Seokjun Choi**, and Seung-Hwan Baek "Differentiable Point-based Inverse Rendering", *The IEEE/CVF Conference on Computer Vision and Pattern Recognition 2024(**CVPR 2024**).*

Suhyun Shin, **Seokjun Choi**, Felix Heide, and Seung-Hwan Baek "Dispersed Structured Light for Hyperspectral 3D Imaging", *The IEEE/CVF Conference on Computer Vision and Pattern Recognition 2024(**CVPR 2024**).*

Experience

Military services in Republic of Korea Air Force, Jul. 2016 - Jul. 2018
15th Special Activity Wing, Republic of Korea. Sergeant in charge of Administration, 256th Tactical Airlift Squadron, 15th Combat Group.

Awards and Honors

- da Vinci Scholarship V,
  Awarded from Chung-Ang University, **2015 - 2020**
- MACH Extreme-Short Film Festival,
  Awarded from 2018 CAU College ICT Engineering Academic festival, **2018**
- MACH Game-Art Contest,
  Awarded from 2018 CAU College ICT Engineering Academic festival, **2018**

Research Project Experience

Neural Rendering for Acquisition of Realistic 3D Assets
Mar. 2023 - Dec. 2023

- Sponsored by SAIT.

Performance Analysis of 2D Image-Based Semantic Segmentation Algorithm
Jun. 2022 - Nov. 2022

- Sponsored by ETRI.

Visual Memory Network-based Cognitive Imitation
Apr. 2020 - Nov. 2020

- Sponsored by ETRI. The goal of the project is developing the network compression algorithm for surveillance cameras.

Teaching

Teaching Assistant

- POSCO AI Expert, 2022/2023/2024
- Data Structure, POSTECH, 2023 Fall
- Computational Imaging, POSTECH, 2022 Spring

Skills

Technical Skills

- Optimization (PyTorch)
- Camera Control (PySpin)
- Image Signal Processing
- Rendering (OpenGL/GLSL)

Languages

- Korean(Native)
- English(Conversational)