

JINMO KIM

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EDUCATION

M.S./Ph.D. Integrated Student in Artificial Intelligence , SNU - Visual & Geometric Intelligence Lab., advised by Prof. Jaesik Park.	Sep 2023 - Present
M.S. Student in Computer Science and Engineering , POSTECH - Computer Vision Lab., advised by Prof. Jaesik Park.	Feb 2023 - Aug 2023
B.S. in Computer Science and Engineering , POSTECH - GPA: 3.83 / 4.3 (<i>Cum Laude</i>)	Feb 2019 - Feb 2023
Sejong Science High School	Mar 2016 - Feb 2019

RESEARCH INTERESTS

3D Vision	Image-to-3D, 3D LiDAR Perception, Robot Vision
Computer Graphics	Neural Graphics (Novel View Synthesis, Surface Reconstruction)

PUBLICATIONS

Domestic

- [1] Kwonyoung Ryu, **Jinmo Kim** and Jaesik Park
다시점 이미지와 회전형 라이더를 활용한 열린 어휘집합의 CLIP 특징점 생성과 3차원 의미론적 물체분할
제 36회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2024
- [2] **Jinmo Kim**, Kwonyoung Ryu and Jaesik Park
고정형 라이더 환경에서의 3차원 객체 인식 도메인 적응 기술 개발
제 35회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2023

EXPERIENCES

Research Participation in POSTECH CV Lab Undergraduate Research Participant Sep 2021 - Feb 2023

- Research of multi-dataset learning in 3D semantic segmentation.
- 3D object detection in embedded system (solid-state LiDAR with Jetson Orin).
- Developed cylindrical LiDAR and omnidirectional camera hardware system.
- Calibration between LiDAR and omnidirectional camera.
- Investigate neural rendering methods for the camera-LiDAR system.

Undergraduate Group Research Program (UGRP) Developer

- 2022 UGRP: Leader and Developer for building 3D POSTECH indoor map with NeRF (Calibration, NeRF)
- 2021 UGRP: Developer of delivery robot with legged-wheel structure (2D LiDAR SLAM)
- 2020 UGRP: Leader and Developer for event detection and handwritten text recognition in lecture video
- 2019 UGRP: Developer of PONIX AI speaker (STT/TTS/Python backend API)

POWER-ON (Robotics Club in POSTECH) Leader

[Club Homepage](#)

- Robotics student club for undergraduates in POSTECH.
- Participate as a member. Feb 2019 - Aug 2021, Aug 2022 - Aug 2023
- Participate as a club leader Aug 2021 - Aug 2022

LaCar (Team of Korean I-Corps Program) EM(Member)

Jun 2020 - Feb 2021

- 2020 Korean I-Corps Program.

- Conducted a customer discovery on solid-state LiDAR calibration system and designed a business model.

SCHOLARSHIPS & AWARDS

GLP (Global Leadership Program) Merit-based Scholarship, KRW 3,000,000 (USD ~2,600)

- Received at Sep 2020, Mar 2021, Sep 2021, Mar 2022. (KRW 12,000,000)

Top Award 2021 UGRP (Undergraduate Group Research Program) Feb 2022

- Topic: Development of Self-driving Delivery Robot with Legged-Wheel Structure

Top Award 2019 UGRP (Undergraduate Group Research Program) Feb 2020

- Topic: Development of PONIX AI Speaker

SKILLS

Programming Languages	C/C++, Python
Libraries / Tools	PyTorch, TensorFlow, Open3D, OpenCV, Git(GitHub, GitLab), Docker
Exposure to	PCL, OpenGL, GLSL, Verilog, MATLAB, Kotlin

TEACHING EXPERIENCES

Mueunjae Student Mentoring Program

- Mentoring program for POSTECH undergraduate students.
- Participate as a mentor of **CSED101 Programming & Problem Solving** course.
- Participated in spring and fall semesters of 2022. Mar 2022 - Jun 2022, Sep 2022 - Dec 2022
- Participated in spring and fall semesters of 2021. Mar 2021 - Jun 2021, Sep 2021 - Dec 2021

CSE Student Mentoring Program

- Mentoring program for POSTECH CSE undergraduate students.
- Participate as a mentor of **CSED261 Discrete Math. for Computer Science** course.
- Participated in spring semesters of 2021 and 2022. Mar 2021 - Jun 2021, Mar 2022 - Jun 2022

POSTECHx CREATOR Lecturer, Course Video Editor May 2020 - Feb 2021

- Making online lecture on basic Arduino development for POSTECH undergraduate students.
- Covers basic concepts of Arduino programming, and complex applications such as PWM, UART, I2C, etc.

Soc,Soc (Story Of Creativity, Story Of Camp) Camp Mentor Jan 2020

- Educational volunteer program.
- Teaching middle school students who cannot easily encounter science programs.
- Taught basic electronic circuits and made a creative circuit town by using copper tapes.

EXTRACURRICULAR ACTIVITIES

StarLovers (Amateur Astronomy Club in POSTECH) Member Sep 2019 - Aug 2023

Clear (Badminton Club in POSTECH) Member Mar 2019 - Aug 2023