JINMO KIM

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EDUCATION

Sejong Science High School

Mar 2016 - Feb 2019

B.S. in Computer Science and Engineering, POSTECH

Feb 2019 - Feb 2023

GPA: 3.88 / 4.3

M.S. in Computer Science and Engineering, POSTECH

Feb 2023 -

Computer Vision Lab., advised by Prof. Jaesik Park.

RESEARCH INTERESTS

Computer Vision LiDAR-based 3D Computer Vision (SLAM, Autonomous Driving, etc.)

Computer Vision Neural Rendering (NeRF)

EXPERIENCES

Research Participation in POSTECH CV Lab Undergraduate Research Participant

Sep 2021 - Present

- Developed cylindrical LiDAR and omnidirectional camera hardware system.
- Calibration between LiDAR and omnidiriectional camera.
- Investigate neural rendering methods for the camera-LiDAR system.

Development of 3D POSTECH Indoor Map Dataset with NeRF Developer

Apr 2022 - Present

- 2022 Undergraduate Group Research Program(UGRP).
- Participate as developer of calibration algorithm and NeRF.

Development of Delivery Robot with Legged-Wheel Structure SLAM Developer

May 2021 - Jan 2022

- 2021 Undergraduate Group Research Program(UGRP).
- Implemented 2D LiDAR integration in robot.
- Developed SLAM algorithms for robot.

POWER-ON (Robotics Club in POSTECH) Leader

Club Homepage

- Robotics student club for undergraduates in POSTECH.
- Participate as a member until the summer of 2021.
- Patricipate as a club leader until the summer of 2022.

Development of Delivery Robot with Legged-Wheel Structure SLAM Developer

May 2021 - Jan 2022

- 2021 Undergraduate Group Research Program(UGRP).
- Implemented 2D LiDAR integration in robot.
- Developed SLAM algorithms for robot.

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

June 2020 - Feb 2021

- 2020 Korean I-Corps Program.
- Conducted a customer discovery on solid-state LiDAR calibration system and designed a business model.

Event Detection and Handwritten Text Recognition in Lecture Video Leader

May 2020 - Jan 2021

- 2020 Undergraduate Group Research Program(UGRP).
- Leader of project.
- Implemented video event detection and handwritten text recognition.

PONIX AI Speaker (AI Speaker for POSTECH Students) Developer

May 2019 - Jan 2020

- 2019 Undergraduate Group Research Program(UGRP).
- Implemented STT, TTS, backend API by Python.

C_oala (Dashboard for Research Papers' Topic Analysis) Leader of Algorithm Team Jul 2019 - Dec 2019

- Developed TF-IDF & word frequency algorithm for research papers by Python.
- Implemented LDA algorithm for research papers by Python.

SCHOLARSHIPS & AWARDS

GLP(Global Leadership Program) Merit-based Scholarship,	\$3,000,000(\$2,600)	Mar 2022

Best Prize 2021 UGRP(Undergraduate Group Research Program)

Feb 2022

• Topic: Development of Delivery Robot with Legged-Wheel Structure

GLP(Global Leadership Program) Merit-based Scholarship, \(\psi_3,000,000(\structure{\$2,600})\)

Sep 2021

GLP(Global Leadership Program) Merit-based Scholarship, \(\psi_3,000,000(\structure{\substack}2,600)\)

Mar 2021

GLP(Global Leadership Program) Merit-based Scholarship, \(\pi 3,000,000(\frac{\$2,600}{})\)

Sep 2020

Best Prize 2019 UGRP(Undergraduate Group Research Program)

Feb 2020

• Topic: PONIX AI Speaker

SKILLS

Programming Languages C/C++, Python Git(GitHub, GitLab)

Exposure to Machine Learning, Open3D, PCL, OpenCV, OpenGL, GLSL, Verilog

TEACHING EXPERIENCES

2022-1 CSE Student Mentoring Program

Mar 2022 - Jun 2022

- Mentoring program for POSTECH CSE undergraduate students.
- Participate as mentor of CSED261 Discrete Math. for Computer Science course.

2022-1 Student Mentoring Program

 $\operatorname{Mar}\ 2022$ - Jun2022

- Mentoring program for POSTECH undergraduate students.
- Participate as mentor of CSED101 Programming & Problem Solving course.

2021-2 Student Mentoring Program

Sep 2021 - Dec 2021

- Mentoring program for POSTECH undergraduate students.
- Participate as mentor of CSED101 Programming & Problem Solving course.

2021-1 CSE Student Mentoring Program

Mar 2021 - Jun 2021

- Mentoring program for POSTECH CSE undergraduate students.
- Participate as mentor of CSED261 Discrete Math. for Computer Science course.

2021-1 Student Mentoring Program

Mar 2021 - Jun 2021

- Mentoring program for POSTECH undergraduate students.
- Participate as mentor of CSED101 Programming & Problem Solving course.

POSTECH x CREATOR Teacher, Course Video Editor

May 2020 - Feb 2022

• Making online lecture of basic Arduino development for POSTECH undergraduate students.

• Covers basic concepts of Arduino programming, complex applications such as PWM, UART, I2C, etc.

Soc, Soc(Story Of Creativity, Story Of Camp) Camp

Jan 2020

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

EXTRACURRICULAR ACTIVITIES

 ${\bf StarLovers(Amateur~Astronomy~Club~in~POSTECH)}~{\bf Member}$

Sep 2019 - Present

Clear (Badminton Club in POSTECH) Member

Mar 2019 - Present