JaeWon **Lee**

Robotics · Multi-Robot · SLAM

25, Galmaejungang-ro, Guri-si, Gyeonggi-do, 11902, Rep. of KOREA

☐ (+82) 10-9114-2756 | ✉ ashcircle@kw.ac.kr | 🏠 lee-jaewon.github.io | 🐙 Lee-JaeWon

"Passion is the genesis of genius."

Summary

This is Jaewon Lee, who wants to be a Multi-Robot engineer and Cooperative Autonomous Driving engineer. I am interested in Robotics, SLAM, Multi-Robot System. I think Robotics can help the development of the world a lot. I want to study a lot and approach the world.

Research Interests

Multi-Robot	Exploration, Navigation, Path Planning, Collision Avoidance, Map Fusion
SLAM	Visual SLAM, Visual Odometry, Optimization

Education

KwangWoon University   *Seoul, S.Korea*
B.S. in School of Robotics   *Mar. 2020 - Feb. 2024(Expected)*
- Current GPA : 4.06/4.50, Current Major GPA : 4.28/4.50
- Club : BARAM Robotics (Robotics Academic Group) - [2022 Vice President], Mar.2020-Present

Work Experience

Robotics A.I. LAB. @KwangWoon Univ   *Seoul, S.Korea*
Undergraduate LAB Intern (Advisor : Prof. Junghyun Oh)   *Jan. 2022 - Jun. 2022*
- Research on Visual SLAM and Computer Vision
- Studying Visual SLAM and implementing Multi-Robot SLAM, Exploration and Path-Planning

ROBOMATION   *Seoul, S.Korea*
R&D Intern   *Jun. 2022 - Aug. 2022*
- Development of Automation System for Soccer Games Using Multi-Robots and GUI for Communication.
- Worked on developing to consider the relationship between robots.

Honors & Awards

Awards

2022-1	**Dean's list**, for Academic Excellence	*Kwangwoon Univ.*

Honors

2022-1	**Full Tuition Scholarship**, for Top seat last semester	*Kwangwoon Univ.*

Skills

Programming	C++/C, Python, Matlab
DevOps	ROS, Git
Framework	Pytorch, Tensorflow, Keras, Unity
Languages	Korean, English

Extracurricular Activity

Technical Blog - lee-jaewon.github.io   *Personal Tech Blog*
Writer   *Jul. 2021 - Present*
- Writing posts about paper review, development, study of Interests.
- Studying through writing and sharing.

Technical Team Blog - ropiens.tistory.com   *Team Tech Blog*

Co-Writer   *Jul. 2022 - Present*

- Writing posts about paper review, development, study of Interests.
- Studying through writing and sharing.

2022 Open Source Contribution Academy   *Ministry of Science and ICT, NIPA*

Mentee   *Jul. 2022 - Present*

- Contributions to translating Pytorch Hub English documents into Korean at the Pytorch Korean User's Group.

Autonomous Driving Simulation with Reinforcement Learning   *BARAM Robotics*

Personal toy project   *Sep.2021 - Nov.2021*

- Autonomous-driving simulation through DQN Reinforcement algorithm in self-made simulator with unity.
- Reward management using DQN, CNN, and Laser Sensor.
- The source code for the project is in **[my GitHub repository]**.

Frontier Based Multi-Robot Exploration   *BARAM Robotics*

Personal toy project   *Mar.2022 - Jun.2022*

- Implementation of ROS-based Multi-Robot SLAM.
- Implementing Frontier Based Exploration and Allocation Algorithm.
- The source code for the project is in **[my GitHub repository]**.

House Interior Classifier and Automatic Recommendation   *2022 Deep Learning Lecture*

Deep-Learning project   *Mar.2022 - Jun.2022*

- Implementation House Interior Classifier.
- This can be automatically recommended on the actual sales site with classified result.
- Using Inception-Resnet-V2 in Keras
- The source code for the project is in **[my GitHub repository]**.

Educational Activities

AI Genius Academy Mentoring   *Organized by Micro School, TresC3*

Teaching Assistant   *Nov.2021*

- Project Assistant with Arduino and Raspberry Pi
- Support students to experience AI and proceed with the project through a Teachable Machine.

Samsung Electronics App Development Mentoring   *Organized by Micro School, TresC3*

Teaching Assistant   *Jan.2022*

- MIT App Inventor training and Project Assistant.