Junseo Min — Researcher

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Personal Statement

Every moment adds to my value; my worth increases with every passing moment.
My deep interest lies in SLAM, navigation, and deep learning. My ultimate dream is to one day tell my children that I developed the algorithm used in a car or a robot.

Education

Kwangwoon University
Robotics — *Major*

Kwangwoon University
Computer Science — *Minor*

Contact & URLs

Email: minjs4562@gmail.com

GitHub: https://github.com/JunseoMin

LinkedIn: https://www.linkedin.com/in/junseo-min-b638582bb/

Blog (Korean): https://velog.io/@junseomin/posts

Portfolio: Junseo's Portfolio

Career

Cheil Worldwide — **Seoul, South Korea**
2022 Samsung Unpack Project - Web QA — *2022.6–2024.09*
- Conducted QA for product description pages and collaborated with overseas teams.
- Developed an interest in software development, leading to a Computer Science minor.

Ubiquitous & AI Lab — **Seoul, South Korea**
Undergraduate Research Assistant — *2022.12–2023.12*
- Studied machine learning fundamentals and transformer attention modules through research papers and advisor discussions.
- Developed a stock price prediction model for the KRX competition using TensorFlow and advanced deep learning techniques.

Immersion — **Seoul, South Korea**
Autonomous Driving Developer — *2023.12–2024.09*
- Built outdoor HD maps and implemented SLAM pipelines for autonomous robots using 3D LiDAR and ROS2.
- Solved technical challenges like sunlight interference and resource limits on Jetson Orin.

Machine Perception and Intelligence Lab (GIST) — **Gwangju, South Korea**
Research Intern — *2024.06–Present*
- Designed LiDAR reconstruction models using Point Transformer V3 and Perceiver architectures.
- Conducted research on localization-related models and advanced 3D reconstruction techniques

Activities

Kwangwoon University — **Baram**
Academic Research Club — *2020.03–2020.11*

Kwangwoon University — **Robotics Department**
Student Council — *2020.03–2020.11*

Kwangwoon University
Autonomous Driving Technician Training Program *2023.05–2023.10*

Projects

1. HD Map Implementation: Developed a high-definition map for advertising robots using ROS and FAST-LIO2. Researched sunlight interference solutions.

2. Attention Robot Implementation: Implemented Stanley controller, path planning, and NDT-OMP localization in ROS2, optimizing performance with OpenMP and Eigen.

3. Stock Prediction Model: Built a Transformer-based stock prediction model using KOSPI data.

4. SmartFarm worker assistant Robot: Developed end-to-end system for mushroom harvesting robot.

Articles

Junseo Min, Inseok Jeon, Sumin Lee, Yunkyo Hong, "AI-Based Worker Assistant Robot: Shaping the Future of Smart Farms", ICROS 2023

Skills & Interests

Programming: C++, Python, ROS1/2, PyTorch *Strong*

Knowledge: Java, Serial Data, Computer Vision *Intermediate*

Interest: SLAM, Navigation, Localization *Professional Interests*