# **Hyunseup Jo**



# **Contact**

## Address:

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## Github:

https://github.com/soup1997

#### **Research Experience**

Research Student at Tech University of Korea, Automotive Embedded System LAB,
 South Korea

Jul.2021-Present

#### **Research Interests**

- · Automotive Embedded Systems
- Path Planning, Vehicle Control
- Sensor Fusion

#### **Education**

#### **Tech University of Korea**

B.S in Department of Electronics Engineering Minor in Future Automotive Engineering

• Total GPA: 4.08 / 4.5, Major GPA: 4.14 / 4.5

## Siheung, Gyeonggi

Mar.2017-Feb.2023

#### **Projects**

#### 2022 Autonomous Driving Contest, Kookmin Univ

AES LAB

Dec.2021-Jun.2022

- Development of calculating curvature angle of vehicle, lateral control system using stanley method
- Development of LiDAR Clustering using DBSCAN for obstacle recognition, obstacle avoidance system
- Development of curved lane recognition using sliding window method

## 2022 Capstone Design

Tech Univ of Korea

## **Autonomous Driving Fire Suppression Robot**

Dec.2021-Jun.2022

- Development of indoor autonomous driving system using SLAM, AMCL
- Development of PI control by obtaining the error of the target value with the motor encoder
- Development of Fire Detection with using YOLO and estimating the distance by curve fitting with mono camera

## Skills

Language: TOEIC (800)

Programming Languages: Python, C, Matlab Microcontrollers: NXP, Atmel, STmicro Operating Systems: Linux, ROS

Others: Git

## **Publication (Domestic)**

• Hyunseup Jo, Sukhyun Seo, "Development of Autonomous Driving Robot for Fire Suppression (화재 진압을 위한 자율주행 로봇개발)", 한국자동차공학회 추계학술대회, 2022

#### **Awards And Honors**

• Creative Project-Community of Practice (Gold prize), Tech University of Korea, South	
Sep.2022	
Dec.2021	
• President's Cup Robot Programming Contest (Encouragement prize), Tech University	
Nov.2021	
Jun.2021	
Dec.2020	
Jun.2018	
Dec.2017	

## Other Experience

## 1. Hyundai NGV Campus SOME/IP Lecture Research Assistant

• Experienced in making lecture materials and examples about SOME/IP Protocol and Service Discovery

## 2. University Teaching Assistant

• Microprocessor 1 Mar.2022-Jun.2022

• Smart Vehicle Sep.2022-Dec.2022

3. Club: Ssibueong (Programming Academic Group)

• Algorithm Study Group

Aug.2021-Sep.2021

- <a href="https://soup1997.tistory.com/category/Algorithm?page=2">https://soup1997.tistory.com/category/Algorithm?page=2</a>
- Learning About Data Structures and Algorithms
- Machine Learning Study Group

Jan.2021-Mar.2021

- <a href="https://soup1997.tistory.com/category/Machine%20Learning">https://soup1997.tistory.com/category/Machine%20Learning</a>
- Watching open course lectures and solve assignments
- Learning about data pre-preocessing, regression, classification