
PERSONAL DATA

Affiliation Korea University of Technology and Education, Cheonan-si, Republic of Korea
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EDUCATION

Mar. 2015 ~ **Korea University of Technology and Education** Cheonan-si, Korea
Present Department of Mechanical Engineering
Undergraduate of Mechanical Engineering
Thesis title : Development of mobile manipulator delivery system integration
Advisor : Prof. Seungryul You

RESEARCH INTEREST

- Collaborative robots with mobility
- mobile manipulation
- Dual-arm manipulation

RESEARCH EXPERIENCES

- **U-WURF**(undergraduate research fellow) at *Department of Mechanical Engineering, UNIST* Jan. 2020 ~ Jan. 2020
✓ Investigate the usefulness of ROS2 on multiple agent systems.

AWARDS AND HONORS

2019 Came in first of the 2019 Hyundai Autonomous vehicle competition, Hyundai & Korea Transportation Safety Authority, Korea
2019 The National Scholarship for Science and Engineering, (Mar. 2019 – Dec. 2020) Korea Student Aid Foundation, Korea

EXTRA-CURRICULAR ACTIVITIES

(Oct. 2018 ~ Jul. 2019)

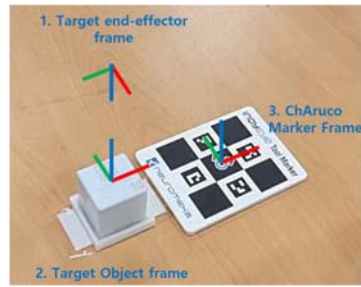
Participated in 2019 Hyundai Autonomous Vehicle Competition

- ✓ camera-lidar sensor fusion, [classified lidar's 3D object's types (e.g. person, car, etc.) by using camera(YOLOv3)]
- ✓ Lidar 3D Object tracking
- ✓ Estimated the roll, pitch of the vehicle by using Gyro, acceleration sensor, and Kalman filter. (using C++, ROS)

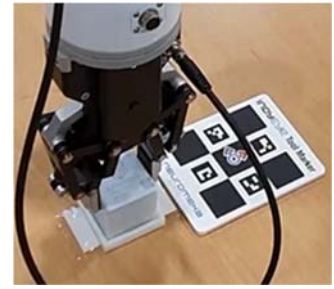
(July. 2019 ~ Present)



1. Moves to take an object.



2. Estimates the object's 6D pose by using ChAruco Diamond Marker.



3. Grasps the object..



4. Checks the object existence by using the second camera (YOLO v3).



5. Moves to deliver the object.



6. Put the object down in the target box.

Be developing the mobile manipulator delivery system integration now.