Yumekobo Junior （Japan）

Point of Robot Performance

The robot recognizes sound commands given by a person using a speech recognition program, and starts operating. It determines which one is a person or an object using an object recognition program. It measures the distance to the person and/or the object to reach them using both ultrasonic sensors and LiDAR. It warns and speaks to the elderly and family members in a human voice using a synthesized voice program. It selects an appropriate action using an image recognition program, and acts.

Team Introduction

【Problem Presentation】
Our sensory functions and motor abilities have gotten worse with age,. So most elderly people become hard of hearing and walking. It is hard to notice when they have a visitor, and even if they do, they cannot move quickly enough. If the robot can provide small assistance, such as receiving a delivery for the elderly, they will feel a small happiness. We are trying developing the robot which supports "a Happy Life" for them and their family.

【Solution】
The robot uses a speech recognition program to recognize sound commands given by a person or an alarm device. When it senses an automatic fire alarm or a J-alert ringing, it warns the elderly of danger immediately and it warns their family members in another place of danger with a smartphone immediately. The robot understands some simple sentences and executes commands such as carrying a delivery to the elderly person.

Kanade Yamazaki （Team Leader）
Michiyuki Shiotani （Sub Leader）
Tomomi Nakamura
Sotaro Higashi

The Fourth High School Memorial Museum of Cultural Exchange, Ishikawa （Online Venue）

Mentor　Takeshi Yamazaki　/　Email　Address： zacky.je9pwy@gmail.com

Advisor　Kosei Demura　/　Kanazawa Institute of Technology