

Task 4: Robot Follow a Person

Regarding the ideas on how to make a robot follow a person. Based on my research sources that I found online, there is a most commonly used for person detection is called a Laser Range Finder (LRF) and uses of cameras for face detection, leg detection and color detection. Using RGB-D camera for face detection and processing the data through OpenCV. LRF uses leg detection algorithm to detect a person's leg to be followed with a use of Kinect sensor. And finally the use of color detection of the person clothing. Using ROS, we can define each node registers the identity to the ROS master include the IP address server, and the name of the topic will be published or subscribed. ROS nodes will be contact ROS master to get the IP address of other ROS nodes to be published with unique topic. ROS nodes can ask the service to do something as for a result of concluding for a robot to follow a person.