

ECE 573 Project

Project Topic

28/01/2016

1 Operator Control Unit for CATVehicle

This application would produce a ROS Compatible Interface that display sensors and actuators information from CATVehicle. Apart from this, the application will be able to check for correctness of the message received and handle errors. As an additional feature, application should be able to send control command to the CATVehicle.

2 Team Members

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3 Apps similar to the topic proposed here

- Wheelphone ROS: This app enables one to understand ROS Interfacing. It publishes sensors and video data and subscribes to commands sent by the user from a computer station.
- ROS Move: This application is a remote controlled robot that runs ROS system. The application contains two types of control and using one using G-sensor and another control inspired by Street View - Google Maps.
- Andropilot: This app, though not a ROS Compatible, is a UAV Control Program. It controls andrupilot based UAV and displays vehicle position on the map.
- FreeFlight 3: This app, also not a ROS Compatible application. is a Parrot Bebop drone controller. This is equipped with an intuitive tactile control interface, adapted for beginners that allows you to jump, fly and roll.

- RobotsAnywhere Console: This app is a non-ROS android app to control RA Vehicle from the smartphone.
- Smart Control Free: This app is a kind of diagnostic tool for car with capability of diagnostic protocols. In addition to fuel consumptions, it also displays performance data, such as power, torque and speed up or braking etc.
- BillSafe Home Monitoring: This app displays camera information from a camera that is left at your house and can also send commands to the home camera. It provides notifications for a variety of things: alarms, camera low battery, or if the camera is moved.
- Rogers Smart Home Monitoring: Can be used to securely view and control an alarm system- arm/disarm, lock/unlock door, view camera feeds, and a variety of other monitoring and control features.
- Remote App: Connects to Apple TV/iTunes and allows for remote control of these things while receiving and displaying information about what is playing.
- Splashtop 2 Remote Desktop for iPhone: Allows home computer to be accessed remotely. Similar in the sense that information sharing and control features must be shared between two devices.