**Data-Flow Diagrams for RC Mode – Pi**

**During setup**

Driver uses PuTTY to SSH into the Raspberry Pi

Driver uses the RPi terminal to execute the drive command

The drive command enables a web browser that will allow the user to control certain settings of the car and see through the camera

**During Driving**

Pi receives that signal and sends it through the motor controller, which results in the vehicle driving!

Nano-receiver sends that signal to the laptop through USB port

Controller sends that joystick signal to its respective nano-receiver

Driver moves the joystick

Laptop sends that signal through to the SSH session controlling the Pi and to the web browser

**During Training**

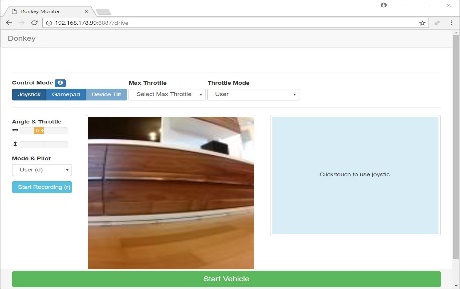
Driver drives around track, collecting data in the form of photos and values that are put into a folder, or “tub”

With a “drive model” command, the car begins driving, using the model as a reference for how it should respond to the environment or “track”

This “model” is transferred back to the Pi via USB or SSH commands

With a “train” command, the laptop takes and analyzes the data to create a model of how the car should run based on your movements

The “tub” of data is transferred from the Pi to the laptop via USB memory stick or SSH commands

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