WEEKLY REPORT and MEETING AGENDA

Report #: 9 Project Name: Open Source Lidar
Date: 4.7.2022 Prepared by: Gaurav Bhalla

Agenda for the weekly meeting

1. Distribute hardware
2. Start working on tasks with hardware in detail.

Accomplishments during this period

1. Began Backup Plan - configured SF30 with Arduino.
2. Understood specifics of the Lidar Message.
3. Created Lidar publishing node sending out the SF30 information.
4. Began working with Arduino to configure motor through PID with encoder.

Plans for next period

1. Write the code on Arduino to collect distance data from lidar.
2. Write the code on Arduino to get motor spinning and collect angle measurements from motor.
3. Flash code onto ST MCU through orange pi. Set up ROS for multiple machines after connecting orange PI to wifi to view hector Slam results through laptop.
4. Set up the motor and make it spin properly.
5. Setup encoder proto-board circuit to help correct motor speed.
6. Print the base for holding the lidar and the overhang to hold the motor.
7. Divide photodiode and laser into separate PCB boards.
8. Create a clear testing procedure.

Project management status

1. Schedule and milestones - Integrating the angle readings and distance measurement into Lidar message.
2. Teamwork - Both teams are meeting for major work session on Saturday at Zach
3. Purchases - Still awaiting the PCB. Waiting for Arduino to arrive.

Minutes from previous meeting

1. Created CDR and Presentation
2. Presented the CDR Presentation
3. Discussed possible contingency plans due to supply chain delays.
4. Received the majority of parts and have begun working on creating a physical system