

Day 4:

Hardware and Firmware:

Today, we completed the PCB design, and it is now ready for review. Additionally, we created a smaller PCB specifically for handling signals from the motor driver. This compact board is designed to connect the signals to the motors and includes proper overcurrent protection to ensure reliable operation and safeguard the components.

Tomorrow, we will begin progressing with the firmware, moving forward with the next critical phase of our project.

Computer vision:

For the computer vision task, we finished the calibration of the 2 images by applying the RANSAC method to find the fundamental matrix. Then, we used the given data (cam0 and cam1) along with the fundamental matrix to find the essential matrix.

We are now working on drawing the epipolar lines between the 2 images.

GUI:

In GUI today we discussed and made a simple layout of the auto and manual windows and how we will handle the communication between the GUI and components of the car making sure we discussed all the features mentioned in the description of the task.