Daily report 5

Hardware and firmware:

- Firmware

For today's progress we wrote the basic mcu code to run the wanted commands and it is 137 line and I divded it into several function for the ease of tracing and to be organized the code will be founded in the repo in atmega code.

- Hardware

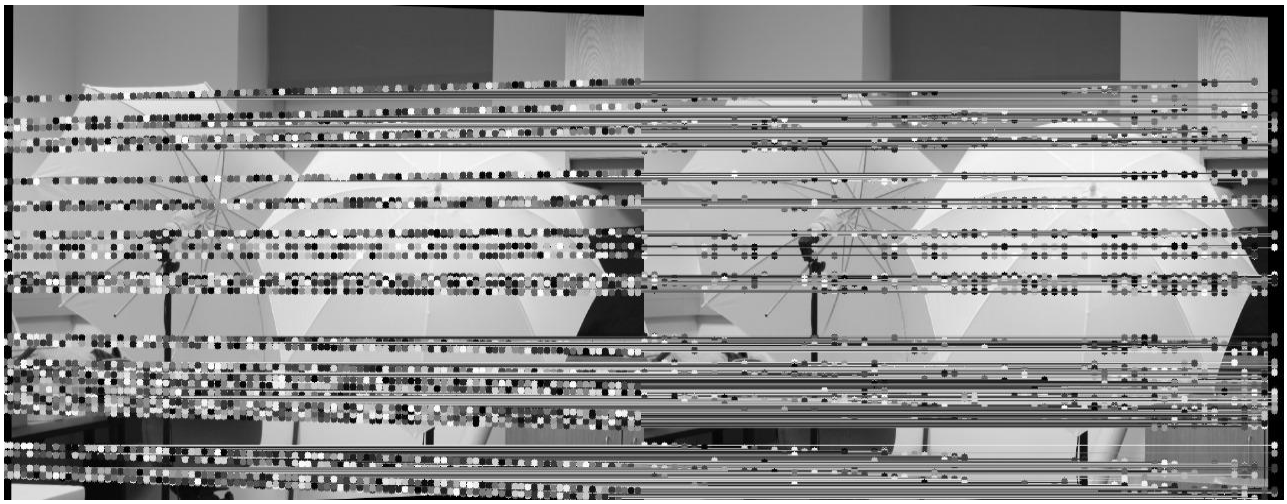
Today, I thoroughly revised every net and track on the PCB to ensure everything was correctly connected and optimized. I also designed a clear and well-organized silkscreen layer to make the board easier to assemble and troubleshoot. Additionally, I added a polygon pour to improve the grounding and overall stability of the design. I extracted the PDF file from Altium, which will help with fabrication process.

Tomorrow, we will start the soldering process for the PCB, moving forward with assembling the components and preparing the board for deployment.

1- Cv:

For the stereo vision task, we made a huge achievement today by finishing a significant part of the task, including drawing the epipolar lines and finding the two homography matrices. After

that, we applied the sum of absolute differences algorithm, and now we are trying to calculate the disparity.



2-Gui:

GUI progress today is Wonderful as we made progress in designing some front end in car control and discussed with each other regarding some functions and how we want each command to be processed about how to visualize the results and how to consider speed and direction of the car and all other features.

Tomorrow we are planning on connecting some components with the GUI and make them interactive and try the communication.