

Daily report_3

Today we made huge achievements in every part of the mega projects we'll discuss and record today's progress in each part now.

- **Hardware and Firmware**

Today, we completed all the schematic and PCB libraries for the components. We also began building the schematic in Altium, marking an important step forward in our design process. Additionally, we found effective solutions for connecting our sensors and indicators, ensuring they integrate smoothly and function as intended within the system.

Looking ahead, we plan to start routing the PCB layout by tomorrow, which will be the next crucial phase in finalizing our design.

- **GIU**

Concerning Gui, significant progress has been made: live feed has been established using webcam and screenshot option has been added to capture frame. Main screen and login screen have been made and traversal between both windows has been achieved. Toggling modes and indicator widgets have been set.

For now, our focus lies on implementing control and bluetooth communication.

- **CV**

Regarding the stereo vision task. We started by studying the key principles used in the stereo vision to ensure a deep level

understanding of the whole topic , we designed the whole code and started writing the first part which is camera calibration we applied the sift algorithm to extract the key points and the descriptors and found the common key points between the 2 images.

We consider our achievements today to be wonderful and we intend to keep this high performance in till the end of the project.