

31/10/21

New components

Things done:

- Tried to send data from host pc to jetson nano via serial but we do not have a usb to uart converter
- Ryan is currently trying to replace jetson nano with Arduino, but we found that microsd port on the jetson nano provides ethernet connection to the host PC, hence we can use socket programming to communicate the 2 components
- I am looking into the DCA1000 board, and will be getting the power supply for it tomorrow (32/10/21)
- New computer vision codes for the L515 is found and modified such that it can determine if people are too close together. Currently it detects by face, but we are currently changing to detect based on profile
- Misread the Teams message and thought that the CA3 was only the presentation, hence, we missed the datasheet last week. We managed to do the datasheet this week, however, as we do not have a completed product, some of the specifications are still missing as we cannot perform the full testing

Current state of project:

- Able to detect humans that are too close (however by face)
- Still unable to communicate with microcontroller from host PC
- Point clouds from IWR6843 is still insufficient (still exploring DCA1000)

Problems faced:

- Unable to communicate with the microcontroller from the host pc as we do not have a UART converter
- Current L515 codes only detects human based on face (due to additional features in codes), changing to detect based on profile

Work to be done:

- Changing of L515 codes to detect based on profile instead of faces
- Get the DCA1000 board working and parsed its data
- Get the Host PC to communicate with the microcontroller