ECE 4970 – Real-Time Welding Feedback
WEEK 8

Dr. Liesl Klein

Fall 2023

• Contact Information

.1   Team Names and Contact Information

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.2   Adviser Information

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.3   Meeting Information

CEER 105 (MDL)
T R 1:00pm – 2:15pm

- ## Weekly Deliverables

    - Complete New project view for the IOS app (Alex)

    - Powered the Bluetooth card on the Arduino (Timmy)

    - Started working on testing the gyroscope (Raf)

    - Sensor inputs to Arduino for data transmission (Sean)

- ## Achieved Goals

    - Solder the gyroscope leads (Timmy)

        - Added the correct pin outs to the gyroscope and successfully powered it on

    - Worked on calibration of the gyroscope in Arduino (Timmy)

        - Completed the code for the gyroscope to calibrate the sensor.

    - Successfully added gauges to the new project view in the IOS App (Alex)

        - Completed the code to have gauges for all the sensors values to display with sliders to adjust the range of the gauge.

    - Attached the Bluetooth card to the Arduino and got the UUID for the card (Timmy)

        - Powered on the cord and successfully connected to a phone to get the UUID for the specific card.

    - Completed the Bluetooth code in the IOS app. (Alex)

        - Finished the code in the XCode project ready to test connection to the Arduino

    - Current Sensor Testing (Sean)

        - Began current sensor testing to make sure manufacture specifications were correct

- ## Non- Achieved Goals

- Getting the gyroscope to give values (Raf)

    • Has been working on the code for the gyro in Arduino.

    • Not achieved because the values are incorrect and random. Unsure of reason why. Trying different source codes from the manufacturer to see if they provide correct output values. Next step is to try a different gyroscope to see if it is a manufacturing defect.

- Packet transmission (Alex and Timmy)

    • We have all the code ready with no connection tested yet.

    • This connection is needed to send the packets.

    • The code was complete but not tested because of time and integration

- ## Next Weeks Deliverables

    • Bench testing of gyroscope (Rafael)

    • Successfully transmit data packet to the app (Alex)

    • Packetize data from the sensors the Arduino (Timmy)

    • Latency testing from the sensors to the Arduino (Sean)

- ## Advisor Approval

Remember to have your advisor review, approve, and grade this report during your meeting!

Approved: _____
      Your Name The
      Date