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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.3 Meeting Information

CEER 105 (MDL)
T R 1:00pm – 2:15pm

□ Weekly Deliverables

- Complete the op-amp circuit by obtaining the correct resistors (Sean).
- Read the current sensor data more accurately with the Arduino (Sean and Timmy).
- Finish 3D printing necessary brackets to attach sensors to the welding machine (Rafael).
- Finish IOS app development to display data obtained (Alex).

□ Achieved Goals

- Complete the op-amp circuit by obtaining the correct resistors (Sean).
    - Op-amp circuit was completed, and we were able to amplify the output of the current sensor to be read by the Arduino.
- Read the current sensor data more accurately with the Arduino (Sean and Timmy).
    - Timmy was able to modify the code so we can now read to the thousands place of a volt. Sean and Timmy were able to integrate the current sensor and the Arduino.
- Finish 3D printing necessary brackets to attach sensors to the welding machine (Rafael).
    - All our brackets were 3D printed at this point in time.
- Power to current sensor (Sean and Alex)
    - We received our power supplies and were able to successfully power the current sensor. Initially, we had power transmission issues we diagnosed the problem as a bad crimp connection. We were able to overcome the issue by crimping on a new connector and successfully delivered 15 volts.
- New project view work progressing
    - This will be the view that the welder sees as they are welding.

- Got the first drop down menu working need to figure out the selections that we would like (Alex)

- We received all of the parts that were ordered!

☐ Non- Achieved Goals

☐ Bluetooth Code still not running properly.

- I have the skeleton code saved in the app
- Have to go through it more to get a better understanding and modify for our application (Alex)

☐ Next Weeks Deliverables

- Bench testing of gyroscope (Rafael)
- Successfully transmit data packet to the app (Alex and Sean)
- Create code to interpret data from gyroscope (Timmy)

☐ Advisor Approval

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

Approved: _____

Your Name The
Date