EE/CprE/SE 491 WEEKLY REPORT 8

04/15/25-04/21/25

Group number: 6

Project title: Wireless Data Acquisition (wDAQ)

Client &/Advisor: Avishek Das and Manojit Pramanik

Team Members/Role: Rocco Yassini, Sam Foster, Jerry Liu, Merrick Czaplewski

Weekly Summary

Continued working on capturing ADC data and displaying it. Still waiting on meeting with client due to unforeseen incidents they are dealing with.

Past week accomplishments

Rocco Yassini: Developed code that stores the ADC data, not just displays it. Started working on MATLAB code that will display the data to ensure the data being captured is good.

Merrick Czaplewski: Worked with the ETG and got the STM link as well as worked on the final design document. Fixing up and giving more detail to previous design documents, making them have the correct information.

Samuel Foster: Assisted team members with developing data storage files for ADC values, as well as assisted in developing MATLAB code for data display.

Jerry Liu: Keeping focus on the coding part and trying to fix connections between ADC and Arduino apps.

Pending issues

- Rocco Yassini: Need to figure out how much data my computer can store, so I
 know how much ADC data I can capture. Need to finish MATLAB code so I
 can display the data. The MATLAB code is only for verification, so I still need
 to figure out how to use LABVIEW and display data in it for the final product.
- · Jerry Liu: Still have errors for the code part when trying to detect ultrasound

frequency, there is an unstable wave of the frequency graphs.

- · Samuel Foster:
- · Merrick Czaplewski: Waiting for support and backup since we are still struggling with getting the project to move faster.

o **Individual contributions**

| <u>NAME</u> | Individual Contributions | Hours this week | HOURS cumulative |
|-----------------------|--|--------------------|---------------------|
| Member 1: Rocco Y | -Designed code that stores the ADC data, not just streams it. Started code to display this captured data in MATLAB. | 2 | 18 |
| Member 2: Sam F | Helped in the development of ADC data storage and the development of MATLAB data display | 2 | 11 |
| Member 3: Jerry L | Trying to fix the error of the ADC code part and make data acquisition more accurate. | 2 | 11 |
| Member 4 Merrick C | Read comments and feedback from professors and TAs to help redo design documents and clean those documents up for the final design document. | 2 | 13 |

o Plans for the upcoming week

Merrick Czaplewski: Work with the team on the MATLAB code, help and be a rubber duck to fix the code and update the process. Reaching out to our advisor who is back, and seeing if he can help us as well. Finishing cleaning up documents and organizing them for the final design document.

Jerry Liu: Keeping work on the ADC code part and fixed the acquisition of the Ultrasound frequency display.

Rocco Yassini: Figure out the maximum amount of data my computer can store, if the

amount is insufficient then I may need to see about alternative devices I can use. Continue working on the MATLAB code, so I can display and verify the captured data. Start learning how to use LABVIEW and how to display data in it.

Samuel Foster: Continue working on data storage and MATLAB data display.

o Summary of weekly advisor meeting

We did not meet with our advisor this past week.