

EE/CprE/SE 491 WEEKLY REPORT 7

04/08/25-04/15/25

Group number: 6

Project title: Wireless Data Acquisition (wDAQ)

Client &/Advisor: Avisehk Das and Manojit Pramanik

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

- Weekly Summary

- Past week accomplishments

Rocco Yassini: Met with Professor Pramanik to get insight into what our next steps should be. Learned that our code is functioning as intended; we are just missing certain parts. The reason axes are constantly changing is that data is coming in too fast and it is merely being displayed. What we need to do is figure out how many data points can be stored on our computer, then add code that stores those data points in a file. Then we must use Labview or MATLAB to display the data, and then it will have constant axes. Also discussed with professor Fila and Shannon to see if we might reorient our project to do more electrical engineering specific work, instead of the primarily software work we were currently doing.

Merrick Czaplewski : Worked with Professors Shannon and Fila to create a game plan to continue to work on our senior design project and get some ways to continue to improve. Worked on gathering more tools and ordered things effectively as well as worked with professor Pramanik to get time to meet with him to move forward. Reached out to professors in control systems to see about getting help from a TA who has more experience with software but have yet to hear back from them.

Samuel Foster: Collaborated with the rest of the team and Professors Shannon and Fila to create a plan for the rest of the senior design project

and classes, particularly to pivot the direction of the project towards a more electrical engineering direction so that team expertise can be used more effectively.

Jerry Liu: Talk with Professors Shannon, Fila and Parmanik. First, to demo our code running an ADC connection with STM 32 microcontroller. Second, Teams tried to make our project more like electrical engineering because we are focused on electrical aspects but the project was extended to more like software engineering right now, so changes that would be more helpful for total teamwork.

○ **Pending issues**

- Rocco Yassini: Figuring out how much data can be stored on my computer and then creating code that takes the data being outputted from the ADC and stores it in a file. Then I need to figure out how to get MATLAB or Labview to plot this data, which will also require some coding.
- Jerry Liu: The connection between ADC and STM 32 microcontroller had an error, team tried to enhance connections by increasing the wired, then fixed code part error.
- Samuel Foster: Need to acquire another STM Link so that progress can be made individually and not when present with the rest of the team.
- Merrick Czaplewski: Getting in contact with two professors in order to get more help, work with the team to find ways to get in contact with outside help to move the process forward. Get the STM link so programmers can continue to work.

○ **Individual contributions**

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Member 1: Rocco Y	- Met with professor Pramonik to get guidance on what our next steps should be. Working on storing data and plotting it.	2	16
Member 2: Sam F	- Met with Professors Shannon and Fila to direct the future of this senior design project.	1	9

Member 3: Jerry L	- Talked with professor Parmonik about the code part issue and tried to make final project more like electrical engineering to do.	2	10
Member 4 Merrick C	- Talk with Professor Shannon and Fila about moving forward with our project. Got into connection with the main advisor to set up a meeting and also talked with TAs to figure out further solutions. Ordered STM link and waiting for arrival.	3	11

○ **Plans for the upcoming week**

Samuel Foster: Collaborate with team to work on data storage and exportation; acquire a second STM link.

Merrick Czaplewski : Acquire second STM Link and hand off to Sam, work with professors and TA to get more help, find a time to work with the team to figure out storing and exporting data for the device.

Jerry Liu: Keep working on the code part, make sure there are no more issues for the connection between ADC and STM 32 microcontroller.

Rocco Yassini : Continue to figure out how to store data and how much can be stored. Then figure out how to save and export that data.