Weekly Report

Week 5: 27/01/2025 – 31/01/2025

Mustafa TOPBAS

4A GPSE

Axel LEROY

4A GPSE

Cédric DA CRUZ

4A GPSE

Abigaïl BROCHARD

4A GPSE

Eloïse MESTRE

Project Tutor

1-Mustafa

Number of hours spent on the project this week: 4 hours

Activity:

Wednesday [29/01/2025]: 4 hours

From 8 a.m. to 9:15 a.m., I searched on the internet and courses how to play on the voltage to see how I go from 12V to 5V. This is necessary to power the arduino which contains the motor code.

We had class at 9:15. From 11am to 12pm, I made the diagram to go from 12v to 5v. I learned about how PWM works in order to understand the current that the motor consumes.

In the afternoon, after Mr. Stolz's presentation, I made a diagram to provide an overall vision of the power supply of each section of the system. I realized that what I did in the morning was not very relevant but still useful.

2-Axel

Number of hours spent on the project this week: 4 hours

Activities: I had 2 activities this week.

First activity: 30 min

My first activity was to go back on the comments you made us on the report with Abigaïl. I also checked with her that her part of the report was remade accordingly to your comments.

Second activity: 3h30

My second activity was to keep researching about the lockbit and unlockbit functions. I first worked on how to check that the data gotten from the image (thanks to the lockbit function) was correct. To do so, I used the unlockbit function to display an image from an array of RGB data. At first, I had a problem with the colour displayed not being the right one. I found out it was because the RGB values stored in the array weren't stored as RGB but as BGR. Then, I managed to display a complete line from the image. To get the data of the full image, I intend to use what I already made and get line by line the data by changing the start pixel coordinates.

3-Cédric

Number of hours spent on the project this week: 4.5 hours

Activity:

I managed to make the brushless motor spins at a designated speed. The problem encountered last time was solved by changing the Arduino function used for controlling the motor (writeMicrosecond() in place of write()) but also by implementing a startup sequence when the system is powered.

4-Abigail

Number of hours spent on the project this week: 4h

Activity:

For this week, I was mainly busy redoing the report. I spent a long time redoing the entire part (I haven't finished yet to dedicate myself to my part in preparation for the S7 advice). I also continued to learn about CAD to be able to do something good.