

ENTIC-lab

Draft PART B proposal

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WHAT are you going to implement?

For part B of the project we want to add some modifications to our ROUV. We would try to implement a sonar that would measure the distance between the ROUV and the seabed, and we would show it from a real-time graphical interface. In addition, this information will be saved to an SD card so that we can easily check the information anytime, anywhere.

HOW are you going to build it?

To implement the sonar, we thought of using the ultrasonic sensor called HC-SR04. With this sensor we can detect objects or the seabed at a distance between 2 and 450cm.

To implement the graphical interface we will use MATLAB where we will process the data and display it through a graph.

And finally to save the data to an SD card we will use a microSD adapter module for Arduino, and modify the code so that we can open a file, write it and save it to the external card.

WHY is it useful?

The reason we want to implement a sonar is to make a study of the seabed and be able to have a tool capable of detecting any object that is polluting this environment as well as cans, bottles and plastic bags.