AUV Meeting Minutes

October 4, 2023

* We further discussed our progress and upcoming plans:
* Ballast:
  + planning to achieve neutral buoyancy by adding weights to the AUV.
  + Matthew Laverty is in charge of buoyancy aspect of project.
    - He has obtained 5 lb of lead shot to use to put into the AUV.
    - Matthew also has a very large bucket which we will fill with water and use to test the AUV for neutral buoyancy.
* Waterproof testing:
  + Justin Day is in charge of waterproof testing.
    - He has obtained an O-ring of larger diameter than the current O-ring around the rim of the AUV opening.
* Raspberry Pi:
  + Current Raspberry Pi is no longer functioning.
  + Will is in charge of Raspberry Pi implementation.
    - He has ordered a new one.
    - However, Will has made significant progress.
      * He has finished the programming and can now set it up so it connects directly to the motor.
        + The Raspberry Pi will send a PWM signal to the ESC which will then power the thrusters.
        + The ESC just needs to be connected to a power source.

The thrusters run by battery voltage. We are going to obtain a converter to convert battery voltage to voltage that is compatible with the Raspberry Pi.

* MAE 434W team discussed their progress. See MAE 434W meeting minutes for details.
* We went to the lab and measured various dimensions including length and rim diameter. Will worked on setting up the Raspberry Pi.