

## AUV Meeting Minutes

September 27, 2023

- Needed components:
  - Raspberry Pi:
    - Takes input from computer and sends it to thrusters as a PWM signal
- Autonomous ability: collisions avoidance will not be implemented by the Fall 2023 MAE 435 team
- Plan for next two weeks:
  - Buoyancy
    - Additional weight to counteract buoyancy force.
    - Weight will be slightly greater than buoyancy force.
    - Lead shot was proposed material for additional weight
    - Seal lead shot in wax so that it doesn't shake around
    - 3D print capsules to hold added weight on exterior of AUV
  - Set up Raspberry Pi
- Discussion of CAD model:
  - We do not have access to previous AUV team's CAD files.
  - We may have to create our own.
- Task assignment:
  - Each team will be given a specific task to work on
  - Each member will report on the work they did in the upcoming meeting
  - A task assignment sheet was created to record each member's task for each week
- File collaboration:
  - A Google Drive folder was created to store files including meeting minutes and task assignment sheet
  - Folder is shared between the 434W and 435 teams.
- Toward the end of meeting, each group split and talked among themselves about their upcoming to do list. To do list for 435 team:
  - Determine volume, weight, and length specifications
  - Buoyancy research
  - Analyze lead shot
    - How much lead shot is needed
    - Where we will place the lead shot
  - Depth in which the AUV will be designed to operate
  - Waterproofing
    - Epoxy