

901700 - Acoustical Ocean Ecology

Week 51

1. Paul McGill
 - a. Spent most of a day updating NVIDIA drivers on DeepDark because latest version of Mathematica wouldn't run with old drivers
 - b. Worked on using Differential Evolution to tune hyperparameters on CNN for sonar return classifier

Week 48

1. Paul McGill
 - a. Have resumed writing code to predict fish species based upon their sonar returns

Week 42

1. Eric Martin
 - a. Consult with Brett for noise mitigation on the EK80 on LRAUV

Week 33

1. Paul McGill
 - a. Worked with Chad W to troubleshoot yet more noise issues with Simrad sonar on REMUS AUV. Shielding additional cables and isolating RS-232 seems to have helped a lot.

Week 25

1. Paul McGill
 - a. Got AOS sensor software to output transducer angles instead of accelerometer counts.

Week 24

1. Eric Martin
 - a. Reviewing paper on the comparative AUV/ROV transect work.
2. Paul McGill
 - a. Working on AOS PIC24 code—much progress but bugs remain
 - b. Edited first draft of Kelly's paper on robotic observer effect

Week 23

1. Paul McGill
 - a. Editing paper on animal avoidance of vehicles.

Week 21

1. Paul McGill
 - a. Working on building new cable for MARS Echosounder

Week 20

1. Paul McGill

- a. Worked with Knute to track down source of ground fault on MARS Echosounder. We found two bad connectors and are working on getting them replaced.

Week 16

1. Paul McGill
 - a. Observed deployment of MARS Echosounder and am working with Knute and Chad W. to figure out what is causing a ground fault in the system.

Week 15

1. Paul McGill
 - a. Did more noise testing of AUV sonar payload. Ordered new DC-DC converters for iBase computer to reduce interference.

Week 13

1. Paul McGill
 - a. Finally got accelerometer talking to PIC micro for sonar xducer orientation sensor. Continuing to work on code to add features.

Week 12

1. Paul McGill
 - a. Spent days rewriting PIC code for AOS (attitude sensor for sonar xducers). Existing code had some serious issues. Not done yet but making slow and steady progress.

Week 9

1. Paul McGill
 - a. Did some sonar testing on LRAUV w/Brett and Brian K. Having trouble finding source of 200 kHz noise.

Week 1

1. Paul McGill
 - a. Added a section to a failure analysis report for the Deimos cable on MARS.