

Duane Edgington

Week 51

- 500055 - VARS, M3/RS, DSG
 - Updated team at last VL meeting
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Training updated yolov5x6 model for Ctenophora sp. A detections in ROV video based upon confusion input from S. Haddock.
 - Running test inference on V4318 video
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Continued work on labeling
 - Refined augmentation module using Albumentations library for training image augmentation.
 - Preparing for SAHI image slicing for inference on the very large pixel count 7952x5304 UAVS images.
 - Participated in coordinated sampling missions Dec 14. (see Tom O'Reilly below)
- 902004 - Planktivore
- Overhead
- Out of Office
 - Dec 10 - 16. NeurIPS 2023. (virtual) UTC-6
 - Dec 21 - Jan 5 Holidays vacation

Week 50

- 500055 - VARS, M3/RS, DSG
 - Team meeting Dec 13, 2023
 - Reported on VARS-ML-SE tasks
 - Discussed task assignment with project manager
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Continued work on sdcat and labeling localizations in preparation for training a model
 - Setting up amazon account for model training
 - Working on tasks preparing to train the first model and run inference on the very large images.
 - Abstract preparation for EGU 2024 (Due Jan 10 2024)
- 902004 - Planktivore
- Overhead
- Out of Office
 - Dec 10 - 16. NeurIPS 2023. (virtual) UTC-6
 - Dec 21 - Jan 5 Holidays vacation

Week 49

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing

- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Training session on 901102-uavs labeling Dec 5, 2023. Following up on action items. Planning follow-up team training session and labeling work.
- 902004 - Planktivore
- Overhead
 - Telecon with Tom Uram of Argonne regarding their GPU enabled supercomputer systems, and process for accessing them for scientific workflows. Very exciting possibility for collaboration.
- Out of Office
 - Dec 10 - 16. NeurIPS 2023. (virtual) UTC-6

Week 48

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office
 - Nov 21 - 22: Vacation (PST) UTC-8
 - Nov 27 - Dec 1: Vacation (EST) UTC-5
 - Dec 10 - 16. NeurIPS 2023. (virtual) UTC-6

Week 47

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Evaluating Yolov5x6 model, 1280 image size, trained with Ctenophora images.
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
 - TBD Potential video conf with Tom Uram from Argonne National Labs
- Out of Office
 - Nov 21 - 22: Vacation (PST) UTC-8
 - Nov 27 - Dec 1: Vacation (EST) UTC-5
 - Dec 10 - 16. NeurIPS 2023. (virtual) UTC-6

Week 46

- 500055 - VARS, M3/RS, DSG
 - Completed assigned tasks on VARS-ML-Tasklist including production runs on VM DORIS to shake out bugs and deliver processed video files to Lonny.
 - Working session with Danelle to refactor directories on Doris to make it easy for different projects to keep their work and products separate on DORIS. Updating documentation.
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Trained a Yolov5x6 1280 model on selected images for targeted detection/classification, using deepsea-ai and bio-ai workflows. Validation statistics are very promising.
 - Running model against selected dive video collection (24 videos) to evaluate performance and usefulness. Using VM DORIS and deepsea-ai PROCESS pipeline.

- Requested quota increase of AWS g4dn EC2 instances, to support running model on ECS elastic compute stack via deepsea-ai ECSPROCESS pipeline
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Team meeting. Planning team training session on data management system for ML.
- 902004 - Planktivore
- Overhead
 - Attended Colleen's lab meeting, with a presentation from ML postdoc.
- Out of Office
 - Nov 15: (virtual) Generative AI (AI World Barcelona) 5pm-9pm (GMT +2)
 - Nov 20 - 22: Vacation (PST) UTC-8
 - Nov 27 - Dec 1: Vacation (EST) UTC-5
 - Nov 29 Potential video conf with Tom Uram from Argonne National Labs
 - Dec 10 - 16. NeurIPS 2023. (virtual) UTC-6

Week 45

- 500055 - VARS, M3/RS, DSG
 - Continued testing/tuning production system on DORIS for launching/monitoring AWS inference jobs. 3 recent dives identified by Lonny have been processed, now to completion. Working through CDK stack behavior tuning.
 - Team meeting
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
 - Team meeting.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Team meeting. Planning training session to team on clustering/labeling toolset.
- 902004 - Planktivore
 - Data handling and model building discussion.
- Overhead
- Out of Office
 - Nov 15: (virtual) Generative AI (AI World Barcelona) 5pm-9pm (GMT +2)

Week 44

- 500055 - VARS, M3/RS, DSG
 - Development and testing of deepsea-ai docker image on VM DORIS continues. Testing with production-level dive video Ventana 2023. Issues being worked on.
 - MBARI GPU meeting Nov 1 with IS team.
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office

Week 43

- 500055 - VARS, M3/RS, DSG
 - Continued work on VARS-ML-SE-tasks, focused on preparing VM DORIS as host for launching deepsea-ai commands (including ecsprocess)

- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Team meeting
- 902004 - Planktivore
- Overhead
 - Follow-up on generative AI workshop and Pytorch Conference.
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- Out of Office

Week 42

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office
 - Oct 11-13 2023. [virtual conference on Generative AI](#). EDT (UTC-4)
 - Oct 16-18 2023. [Pytorch conference](#). SFO (in person). PDT (UTC-7)

Week 41

- 500055 - VARS, M3/RS, DSG
 - Continued work on VARS-ML-SE tasks. Working on deepsea-ai docker service on Doris VM. Testing on digits dev box.
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office
 - Oct 11-13 2023. [virtual conference on Generative AI](#). EDT (UTC-4)
 - Oct 16-18 2023. [Pytorch conference](#). SFO (in person). PDT (UTC-7)

Week 40

- 500055 - VARS, M3/RS, DSG
 - Continued work on VARS-ML-SE tasks. Finished testing of flags/parameters AWS. Finished testing of handling/logging upload failure from M3 (network hiccup). With Danelle, finished testing of docker cuda service on Olivia local machine.
 - With IS, brought workstation Maximilian up for cuda/ML work, deployed to Brian S. office, with 10G ethernet networking. Nvidia RTX A4000 GPU with cuda/pytorch/docker/AWS stack.
 - MBARI VM doris being brought up for deepsea-ai (dsai) AWS job launching.
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
 - Meeting on prep for Oct demonstration Sept 29.

- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Team meeting.
- 902004 - Planktivore
- Overhead
- Out of Office
 - Oct 11-13 2023. virtual conference on Generative AI. PDT (UTC-7)
 - Oct 16-18 2023. Pytorch conference. SFO (in person). PDT (UTC-7)

Week 39

- 500055 - VARS, M3/RS, DSG
 - Continued work on VARS-ML-SE tasks. Finished testing of flags/parameters AWS. With Danelle, testing of docker service on Olivia local machine.
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office
 - Oct 11-13 2023. virtual conference on Generative AI. PDT (UTC-7)
 - Oct 16-18 2023. Pytorch conference. SFO (in person). PDT (UTC-7)

Week 38

- 500055 - VARS, M3/RS, DSG
 - Continued testing deepsea-ai process and ecsprocess ml inference updates.
 - Worked on tasks as assigned VARS-ML-SE-tasks
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
 - Alexa monitoring
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office
 - Oct 11-13 2023. virtual conference on Generative AI. PDT (UTC-7)
 - Oct 16-18 2023. Pytorch conference. SFO (in person). PDT (UTC-7)

Week 37

- 500055 - VARS, M3/RS, DSG
 - Continued testing of enhancements to deepsea-ai
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Team is submitting an abstract to OSM 2024.
- 902004 - Planktivore
- Overhead
 - Preparation for virtual conference on Generative AI
- Out of Office

- Oct 11-13 2023. virtual conference on Generative AI. PDT (UTC-7)
- Oct 16-18 2023. Pytorch conference. SFO (in person). PDT (UTC-7)

Week 36

- 500055 - VARS, M3/RS, DSG
 - Continued work on VARS-ML-SE-tasks action items, and testing
 - Team meeting Aug 30
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Preparation for training a model
 - Testing scripts after code refactor
- 901502 - Passive Acoustic Sensing
 - Meet with Scott Viers of Orcasound, along with rest of 901502 team, Monday Sept 11
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office
 - Oct 11-13 2023. virtual conference on Generative AI. PDT (UTC-7)
 - Oct 16-18 2023. Pytorch conference. SFO (in person). PDT (UTC-7)

Week 35

- 500055 - VARS, M3/RS, DSG
 - Testing/debug updates to deepsea-ai process command
 - Team meeting Aug 30
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
 - Proposal response discussions.
 - Reviewing Alexa status
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Proposal response discussions
- 902004 - Planktivore
 - Proposal response discussions
- Overhead
 - Minor AWS work for 902204
 - Proposal response discussions 902111
 - DEI seminars
- Out of Office
 - Oct 16-18 2023. Pytorch conference. SFO (in person). PDT (UTC-7)

Week 34

- 500055 - VARS, M3/RS, DSG
 - Working on VARS-ML pipeline worksheet action items and testing
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Discussions with Steve Haddock and Danelle on MT proposal feedback
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore

- Overhead
 - Working with project leads on MT phase 1 feedback to 2024 proposals.
- Out of Office
 - Oct 16-18 2023. Pytorch conference. SFO (in person). PDT (UTC-7)

Week 33

- 500055 - VARS, M3/RS, DSG
 - Preparation for the next meeting August 23. Reviewing action items; preparation for the next round of model training and dive inference.
 - Working on fix for issue renewing training from checkpoint (device out of space error)
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Prepared collaborator agreement with Tarun Sharma (Caltech Ph.D. Student, who just finished summer 2023 MBARI internship).
 - Code walkthrough with Tarun
 - Reviewing work plan and next steps
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Team meeting
- 902004 - Planktivore
- Overhead
- Out of Office
 - Oct 16-18 2023. Pytorch conference. SFO (in person). PDT (UTC-7)

Week 32

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Wrapping up summer internship Tarun Sharma
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office
 - Oct 16-18 2023. Pytorch conference. SFO (in person). PDT (UTC-7)

Week 31

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Trained YOLOv5/StrongSORT i2MAP model with 70 classes, 11,201 images, and 80,156 localizations as curated by Danelle. Evaluating now. Ran inference on several videos (i2MAP dives and a Ventana dive) to review performance. Also trained "ROI" model where the 70 classes were collapsed to one class (region of interest) to compare with intern Tarun's Megadetector, and to compare with the 70 class model.
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office

- July 23-July 29 2023. ICML (virtual). HST (UTC-10) Semi-supervised learning representations tutorial.
- AWS summit July 26 (virtual)
- Oct 16-18 2023. Pytorch conference. SFO (in person). PDT (UTC-7)

Week 30

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Building tracking model against i2MAP localizations
 - Intern Tarun Sharma wrapping up a very productive summer of exploration of semi-supervised / self-supervised model exploration against midwater image datasets
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office
 - July 23-July 29 2023. ICML (virtual). HST (UTC-10) Semi-supervised learning representations tutorial.
 - AWS summit July 26 (virtual)
 - Oct 16-18 2023. Pytorch conference. SFO (in person). PDT (UTC-7)

Week 29

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Continuing work on detectors/trackers. Starting to train models for several detectors to compare/contrast including yolov8 and Vit
- 901502 - Passive Acoustic Sensing
 - Team meeting
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Team meeting
- 902004 - Planktivore
- Overhead
- Out of Office
 - July 23-July 29 2023. ICML (virtual). HST (UTC-10)
 - Oct 16-18 2023. Pytorch conference. SFO (in person). PDT (UTC-7)

Week 28

- 500055 - VARS, M3/RS, DSG
 - Proposal work
 - Team meetings
- 901009 - CANON
 - Read 2024 proposal
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Proposal work.
- 901502 - Passive Acoustic Sensing
 - Proposal work
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Proposal work
 - Team meeting
- 902004 - Planktivore

- Proposal work
- Overhead
 - Proposal work 902111, others
- Out of Office
 - July 23-July 29 2023. ICML (virtual). HST (UTC-10)
 - Oct 16-18 2023. Pytorch conference. SFO (in person). PDT (UTC-7)

Week 27

- 500055 - VARS, M3/RS, DSG
 - Proposal work. Reviewing documentation on model training.
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Proposal work. Reading up on SOTA trackers and detectors.
- 901502 - Passive Acoustic Sensing
 - Proposal work. Reading up on Orca sound classification.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Proposal work.
- 902004 - Planktivore
- Overhead
- Out of Office
 - July 23-July 29 2023. ICML (virtual). HST (UTC-10)
 - Oct 16-18 2023. Pytorch conference. SFO (in person). PDT (UTC-7)

Week 26

- 500055 - VARS, M3/RS, DSG
 - Team meeting, proposal process.
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Work continues. Proposal process.
- 901502 - Passive Acoustic Sensing
 - Team meeting, proposal process.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Team meeting, proposal process.
- 902004 - Planktivore
- Overhead
 - Some proposal-process work outside current projects.
- Out of Office

Week 25

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office
 - Virtual [CVPR 2023](#) June 18 - 22.

Week 24

- 500055 - VARS, M3/RS, DSG
 - Met with project manager NancyJ to go over my roles and responsibilities on project 2023. Added to biweekly project team meetings.
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Continued work with Danelle on clustering and active learning tools for midwater images and concepts
 - Sessions with intern Tarun Sharma, who will be working on semi-supervised learning applied to midwater video (learning classes using few labels).
 - Running Vision Transformer for Small-Size Datasets for training against midwater images. Debugging with Danelle midwater image dataset conversion to CIFAR100 format.
 - Running colab and AWS sagemaker studio for 901103 work.
 - Tests on gpu box OLIVIA to Ubuntu 22.04 LTS with cuda drivers from Lambda Stack. Working fine for accelerated pytorch; debugging accelerated tensorflow.
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office
 - Virtual [CVPR 2023](#) June 18 - 22.

Week 23

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Continued work with Danelle on clustering and active learning tools for midwater images and concepts
 - Welcome intern Tarun Sharma June 5 - Aug 11, who will be working on semi-supervised learning applied to midwater video (learning classes using few labels).
 - Running Vision Transformer for Small-Size Datasets for training against midwater images. Successfully trained against CIFAR-100 as a test run on AWS SageMaker Studio. Uploaded trained model to [huggingface](#)
 - Running colab and AWS sagemaker studio for 901103 work.
 - IS upgraded gpu box OLIVIA to Ubuntu 22.04 LTS with cuda drivers from [Lambda Stack](#).
- 901502 - Passive Acoustic Sensing
 - Team meeting June 7.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office
 - [CVPR 2023](#) June 14 - 22.

Week 22

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Continued work with Danelle on clustering and active learning tools for midwater images and concepts
 - Arranged office space & Ubuntu workstation for incoming intern Tarun Sharma June 5 - Aug 11.
 - Setting up Vision Transformer for Small-Size Datasets for training against midwater images. Successfully trained against CIFAR-100 as a test run on AWS SageMaker Studio.
 - Set up AWS sagemaker studio for 901103 work.

- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Team meeting May 31.
- 902004 - Planktivore
- Overhead
- Out of Office

Week 21

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Continued work with Danelle on clustering and active learning tools for midwater images and concepts
 - Arranged office space for incoming intern Tarun Sharma June 5 to Aug 11.
 - Setting up Vision Transformer for Small-Size Datasets for training against midwater images. Successfully trained against CIFAR-100 as a test run.
 - Setting up AWS sagemaker studio for 901103 work.
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office

Week 20

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
 - Team meeting May 11, May 18
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Continued work with Danelle on clustering and active learning tools for midwater images and concepts
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Continued work with Danelle on unsupervised clustering and active learning tools for UAV images and concepts
 - Team meeting May 18
- 902004 - Planktivore
- Overhead
- Out of Office

Week 19

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Continued work with Danelle on active learning tools for midwater images and concepts
- 901502 - Passive Acoustic Sensing
 - Team meeting May 10
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Continued work with Danelle on active learning tools for UAV images and concepts
 - Collaborator meeting May 8
 - Team Meeting May 10
- 902004 - Planktivore
- Overhead

- Out of Office

Week 18

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
 - Team meeting May 4
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Continued work with Danelle on active learning tools for midwater images and concepts
- 901502 - Passive Acoustic Sensing
 - Team meeting April 26
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Continued work with Danelle on active learning tools for UAV images and concepts
 - Team meeting May 3
 - Collaborator meeting planned May 8
- 902004 - Planktivore
- Overhead
- Out of Office

Week 17

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
 - Team meeting April 20
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Continued work with Danelle on active learning tools for midwater images and concepts
- 901502 - Passive Acoustic Sensing
 - Team meeting April 26
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Team meeting April 26
- 902004 - Planktivore
- Overhead
- Out of Office
 - Vacation Friday April 28

Week 16

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
 - Team meeting April 20
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Continued work with Danelle on Active Learning tool and framework
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Quick research on AI infill tools to mask (erase) overly salient objects
- 902004 - Planktivore
- Overhead
 - Quarterly check-in meeting
 - Reviewed AWS Cost Explorer with Lonny so he can explore 500055 charges.
 - Teleconference with upcoming intern Tarun Sharma
- Out of Office

Week 15

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
 - Team meeting April 6.
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Working session with Danelle April 11.
 - Exploring human in the loop active learning tools
 - Experiments in progress on “top 20” midwater concepts
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office
 - Working from home while recovering from sick leave

Week 14

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office
 - Vacation: March 21 - 29. Sick leave March 30 - April 5.

Week 13

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office
 - Vacation: March 21 - 31. Back in office April 3.

Week 12

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
 - Assisted Danelle, Carlos with their PyPam evaluation AWS run with Cost Explorer reports from the days of their runs.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office
 - Vacation: March 21 - 31. Back in office April 3.

Week 11

- 500055 - VARS, M3/RS, DSG
 - Explored why some videos from dive D1377 did not load in Lonny's giant January AWS ECS submission. By carefully examining the AWS cloudwatch logs I determined that the missing videos were not successfully uploaded to AWS S3. We don't know if that was due to a titan issue, or networking issue, or other. Issue posted to github to improve feedback/logging of video submissions and processing status in deepsea-ai portal.
 - Ran a job with Danelle to resubmit dive D1377 and monitor successful completion and loading of missing video data into deepsea-ai. So far so good. It should be completed by the end of March 15.
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Continued exploration of tools to facilitate active learning for creation of midwater image training library.
- 901502 - Passive Acoustic Sensing
 - Team meeting. To participate in AWS cost analysis with Carlos and Danelle on recent PyPam runs for presentation Friday.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Continued exploration of tools for detection.
- 902004 - Planktivore
 - Team meeting
- Overhead
 - Enabled Lonny to be able to run AWS Cost Explorer for him to monitor costs for video lab work.
 - Campaign to slash EFS daily charges (related to SageMaker Studio EFS volume) was successful. Backed up work to sync'd S3 bucket, including glacier store.
- Out of Office
 - Power outage March 10 - 11.
 - Vacation: March 21 - 31. Back in office April 3.

Week 10

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Summer intern candidates selected. Offer extended to one candidate.
 - Exploring candidate tools/methods for active learning support
- 901502 - Passive Acoustic Sensing
 - Team meeting
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Working session with Danelle to bring up YOLOs and SAHI on AWS SageMaker Studio, and to pump aerial images to S3 bucket.
 - Team meeting.
- 902004 - Planktivore
 - Weekly meeting
- Overhead
 - Group meeting
- Out of Office

Week 9

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing

- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
- Out of Office

Week 8

- 500055 - VARS, M3/RS, DSG
 - IS says “no problem upgrading from MacOS Monterey 12.6.3 to MacOS Ventura 13.2.1” Wish me luck...
 - Continued work drilling into AWS SageMaker Studio EFS volume maintenance. Some progress, but more to do.
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Project meeting with Danelle to discuss workflow
 - Continuing exploration of Active Learning for Object Detection
 - FathomNet workshop Feb 22-23
- 901502 - Passive Acoustic Sensing
 - Attended AWS Alexa Skill Quality Coach webinar
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Project meeting planned for next week
- 902004 - Planktivore
 - Team meeting Feb 22.
- Overhead
- Out of Office

Week 7

- 500055 - VARS, M3/RS, DSG
 - Continued exploration of the EFS file system attached to SageMaker Studio issue. Will be pursuing suggestions received from AWS Support Feb 15.
- 901009 - CANON
 - Attended team meeting (zoom) and reviewed campaign plan presentation materials.
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Working session with Danelle. Installed VARS system on my M1 workstation. Brian/Lonny tells me I need to be updated to MacOS Ventura (13.2.1) for recent VARS video viewers/localization viewers to work. IS has set up my system at MacOS Monterey (12.6.3). I will check with IS if that upgrade will cause issues.
 - Brian has a patch, for me to try: VARS Annotation-1.4.8.zip
 - Continuing research on Active Learning for object detection/classification.
- 901502 - Passive Acoustic Sensing
 - Alexa MBARI Ocean Soundscapes: Verified live streaming restored after IS system patching and needed reboot
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
 - Reviewed kickoff presentation materials.
- Overhead
- Out of Office
 - Plan remote work from home Feb 15 - 16.

Week 6

- 500055 - VARS, M3/RS, DSG

- Some work/discussion on VAA deepsea-ai documentation. Ran test of documented processing flow on AWS ECS.
- 901009 - CANON
 - Team meeting Feb 9
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Reading papers on active learning strategies.
- 901502 - Passive Acoustic Sensing
 - Alexa Skill streaming of live stream is back up upon restoration of [shoutcast streaming](#)
 - Biweekly team meeting. Met with John Ryan to discuss AWS storage products and ideas for pypam processing of historical data on AWS.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
 - Weekly engineering meetings started Feb 8 2023. First team goal is ECOHAB deployment on LRAUV in April.
 - Stakeholder meeting planned for Feb 14.
- Overhead
 - Performance discussion. 2023 plans.
 - Peer Review of paper for Frontiers in Marine Science
- Out of Office

Week 5

- 500055 - VARS, M3/RS, DSG
 - Monitored Lonny's Paull dive series run on AWS. ECS runs were successful, over several days.
 - Removed Lonny's SageMaker Studio App per his approval.
- 901009 - CANON
 - No meeting this week.
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
 - Shoutcast / Alexa Skill monitoring. Live stream is down.
 - Team meeting Feb 1.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
 - Meeting postponed
- Overhead
 - Attended webinar "Efficient AI for Wildlife Conservation", Professor Sara Beery
 - Continued work exploring EFS on AWS. Trying to attach to an EC2 instance.
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- Out of Office

Week 4

- 500055 - VARS, M3/RS, DSG
 - Working on deepsea-ai documentation. Our task is to meld in vaa-docs to form one up-to-date documentation repo.
- 901009 - CANON
 - Reviewed 2023 project kickoff slides
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Looking into yolov8 documentation, multi-gpu training, etc.
- 901502 - Passive Acoustic Sensing
 - Team meeting Jan 18, 19
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach

- 902004 - Planktivore
- Overhead
 - Continuing Coursera AWS Security course.
- Out of Office

Week 3

- 500055 - VARS, M3/RS, DSG
 - Met with Timothy Ryter, AWS Storage Specialist, along with Emmett and Ted, regarding EFS storage volume and SageMaker Studio. Timothy provided guidance on how to examine an EFS volume, and how to potentially reduce lifecycle costs. Timothy and Ted are going to check with the SageMaker Studio team to ensure Timothy's advice is sound, and then inform me of that team's guidance.
- 901009 - CANON
 - Kickoff meeting Thursday Jan 19.
- 901103 - Biodiversity and Biooptics of Zooplankton
 - We are researching and implementing [AWS Secrets Manager solution](#) for passing keys to deepsea-ai database
- 901502 - Passive Acoustic Sensing
 - Team meeting Wednesday Jan 18.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
 - Performance feedback
- Out of Office

Week 2

- 500055 - VARS, M3/RS, DSG
 - AWS work on AWS secrets manager, cost explorer
 - Meeting scheduled for Thursday Jan 12 with Ted Zamborsky and an AWS EFS specialist regarding our EFS daily charges and use with SageMaker Studio and other AWS services.
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
 - Project planning work with Danelle and Kevin B.
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
 - Finished first module of Coursera AWS certification. Started on #2 (Security)
- Out of Office

Week 1

- 500055 - VARS, M3/RS, DSG
- 901009 - CANON
- 901103 - Biodiversity and Biooptics of Zooplankton
- 901502 - Passive Acoustic Sensing
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 902004 - Planktivore
- Overhead
 - Engineering meeting Tues
 - Group meeting Weds
 - Training. Continuing AWS Coursera course.

- Researching AWS secrets manager, security token service, and key management service for database access secrets management
- Out of Office