

Brian Schlining Sorted By Project

500055 - VARS, M3/RS, DSG

- First iteration of new Sharktopoda completed and released to the video lab. This allows localization/annotation directly on a video. (Week 1)
- New Sharktopoda has been integrated with VARS Annotation 1.4.0-rc8 (Week 1)
- Released my first library to maven central. Vcr4j, which provides the integration between VARS and Sharktopoda (among other things), has been published to <https://repo1.maven.org/maven2/org/mbari/vcr4j/> (Week 1)
- Released VARS Annotation 1.4.3. This includes support for localizations of annotations directly on video using Sharktopoda 2 (Week 3)
 - This release surfaced some issues with Sharktopoda 2. Investigating those. (Week 3)
- Sharktopoda 2 requires Mac Ventura. With every new release of macOS, Apple changes the signing requirements for applications. If these requirements aren't met, Apple makes it extremely difficult for users to start the apps. Ventura continues this tradition. Brian is working with IS to get the signing and notarizing certificates needed to meet Apple's security requirements for both Sharktopoda and VARS Annotation. (Week 3)
- The latest Sharktopoda video player is now running in the video lab for evaluation with VARS Annotation. This allows visualization, creation, and editing of localizations created by hand or via machine learning directly on video. (Week 4)
- Worked through Apple's latest code signing and notarization requirements for both Sharktopoda and VARS Annotation. (Week 4)
- Dealt with the usual Iron Mountain video imports. (Week 4)
- Started work on updating the import of ML generated annotations into VARS to work with the latest version of the deepsea-ai graphql API. (Week 4)
- Imported Mini ROV annotations for dives M0180 through M0192 into the main VARS database. (Week 4)
- Fixed a bug in VARS that prevented the frame-advance feature in a shuttle controller from working with the new Sharktopoda. (Week 4)
- Working on the final stage of the ML pipeline ... pushing data to VARS. Working though integration testing now. (Week 5)
- Reviewed M3RS documentation for video lab (Week 5)
- Fixed frame advance issue in VARS for the new Sharktopoda. (Week 5)
- Added database indexes for the deepsea-ai database (Week 5)
- Restored services that tanked after the power outage. (Week 5)
- Iron Mountain video imports. Rough estimate of work completed to date: 4,067 of 6,668 dives converted from tape to video. (Week 6)
- Updated the `annotations\_legacy` view in the M3_ANNOTATIONS database so Steve Haddock can use beholder to grab ad hoc images of annotations. (Week 6)
- Milestone: Loaded the first series of dives analyzed by machine learning into VARS. 16 dives (D1372 - D1389) were processed, producing 84,687 localized annotations. These annotations are all tagged with the group 'ROV:pending-verifications'. Addressed issues in the new tooling used for working with these annotations in VARS. (Week 6)
 - Develop tools to preview data in Sharktopoda for both the full ML output (which is very large) and the subset of data that would be imported into VARS. (Week 6)
- The TableView control used in VARS is thoroughly broken. (Due to changes introduced by the JavaFX library developers over time). Brian is starting a rewrite of a table control to work around these issues. Related issues are: [here](#), [here](#), and [here](#). (Week 6)

- Rewrote the code that syncs dive information into VARS. The previous version was written before we started the video conversion process (Iron Mountain). The amount of new video files was overwhelming the app. (Week 6)
- The last round of server patches broke the docker daemons on a few servers. Worked with IS to get those back up. (Week 7)
- Updated the vars-kb and vars-query apps to build on Java 19. (Week 7)
- Working with Paul Rogers on improvements to Sharktopoda based on video lab feedback. (Week 7)
- Released VARS Annotation 1.4.8. This release replaces the JavaFX TableView component with a Swing-based one to work around long-standing, hard-to-squash bugs: #128, #129. (Week 7)
- With the recent major changes in VARS. Brian is running through a bug hunt exercise to chase down edge cases. (Week 7)
- Testing out a timeline view to VARS. (Week 7)
- VARS Bug hunt to address outstanding issues. There were two new VARS releases last week. (Week 8)
- Sharktopoda 2.0.3 was released. This addresses feature requests from the video lab. (Week 8)
- Ongoing Iron Mountain video imports from our video tapes. (Week 10)
- The machine running the ML model server used by VARS had a RAID failure. This service has been very popular with the video lab, so Brian moved the service to a temporary machine. Details here. (Week 10)
 - Started investigation into simplifying the ML model server (written by CVisionAi). The service currently has a complicated software stack that could be greatly simplified. (Week 10)
- There's a new share at titan:/M3_ML for archiving machine learning models used for analysis by the video lab. (Week 11)
- Created a new service, <https://github.com/mbari-org/pythia>, for applying yolov5 inference to images. This service is a replacement for <https://github.com/mbari-org/keras-model-server-fast-api> (Week 11)
- Resolved some issues with a large machine learning data import into VARS. (Week 12)
- Iron Mountain video imports (Week 12)
- Set up Pythia, a new machine learning inference service internally and externally. Brian also released Pythia as open source. Pythia is integrated into VARS. (Week 12)
- Upgraded VARS on the Mini ROV. Worked with Kent Headley to sort out a new seg fault with the framecapture server. (Week 12)
- Ran integration testing on the new SQL Server 2022 servers, Venus and Rhea, to verify that existing applications and services work with the server upgrades. (Week 12)
- Refactoring vampire-squid to remove some technical debt. (it's about seven years old now) (Week 13)
- Working off some technical debt on the vampire-squid microservice (MBARI's video asset manager) (Week 14)
- Iron Mountain video imports (Week 14)
- Worked with Neil to troubleshoot disk issues on our database server, Perseus (Week 14)
- Iron Mountain video imports (Week 15)
- Closed out contract with Paul Rogers for Sharktopoda development. (Week 15)
- Started working on the new DSG again. At this point, I'm mostly translating existing code used in the demo at <http://m3.shore.mbari.org/deepseaguide/> from Vue 2 to Vue 3. (Vue 2 reaches its end of life this year) (Week 17)
- Iron Mountain video imports (Week 18)
- Tweaked the M3 NGINX proxy server to display README files in directory listings. Added README's to all top level directories. This was needed as some scientists were unknowingly recalling many, many ProRes files from LTO by browsing to them through the web. See <http://m3.shore.mbari.org/videos/M3/master/>. (Week 24)
- Iron Mountain video imports (Week 25)
- Iron Mountain video imports (Week 26)
- Investigating bounding box mis-alignments on ML generated proposals. (Week 26)
- Updated framecapture software on the Rachel Carson for the newly installed 4k Camera. (Week 28)
- Upgraded VARS and all services on the Rachel Carson to better support the large 4k framegrabs which can be slow to capture. (Week 28)
- Started working on spec for web services to be used to apply ML to individual video files. (Week 28)

- Putting together code to probe this issue (#56) where different methods of framecapture return slightly different frames from the video. This is causing issues with ML bounding boxes being misaligned on images. (Week 28)
- Continuing investigation of subtle framegrab/bounding box misalignments from different framecapture methods at [mbari-org/vars-feedback#56](https://github.com/mbari-org/vars-feedback#56). (Week 29)
- We continue to be plagued by slow 4k framecapture on ships. Investigating at <https://github.com/mbari-org/vars-feedback/issues/58>. (Week 29)
- Proposed a spec for very simple web services to process video files using volov5. (Week 29)
- Iron Mountain Video Imports (Week 32)
- Meeting with Visceral to discuss deep-sea guide redesign (Week 32)
- Investigating time misalignments between ffmpeg and sharktopoda. (Week 32)
- Prototyping ideas for new VARS query web application (Week 32)
- Reviewing changes to external data embargoes and implementing them. (Week 35)
- Iron Mountain video imports. We're almost done!!!! (Week 35)
- Still working through embargo issues (Week 36)
- Iron Mountain video imports (Week 36)
- Completed audit of existing and new data embargoes. Applied the embargoes to FathomNet as well as the external DSG and KB and cleaned up any escapees. (Week 37)
- Starting working with Paul Rogers to address issues with video frame alignment in Sharktopoda. This is needed for the video lab's machine learning/human-in-the-loop workflows. (Week 37)
- Ran a sanity check with Kent Headley's latest changes to libbmagic against the 4k camera on the RC. (Week 37)
- Looking into dropping use of web frameworks for front end development of the DSG. Doing testing and research using web components, and straight javascript/html/css. (Week 39)
- Iron Mountain video imports. We're almost done!!!! Except for a few problem tapes, all ROV video tapes have been converted to video files and registered in our video asset manager. (Week 39)
- Investigating performance issues with bulk updates made to annotations (See annosaurus) (Week 40)
- Met with Paul Rogers to discuss differences in seek time into a video between ffmpeg and sharktopoda. This is a key issue to resolve for the machine learning pipelines. (Week 40)
- IS setup a new GPU box for our group to use for local ML video processing. (Week 40)
- Investigating bulk edit/update performance issues with annosaurus. Starting heavy lift from eclipselink to hibernate. Will also be adding hibernate envers for history change tracking. (Week 41)
- Started prototype to aggregate i2MAP master and mezzanine files which are offset by 1 second. (Week 41)
- New release of Sharktopoda video player that addresses issues #50 and #56 that deal with differences in frame number interpretation between ffmpeg and sharktopoda. (Week 42)
- Wrote a fix for issue #63 to sync i2MAP master and mezzanine video timestamps. (Week 42)
- Upgraded Charybdis from helidon 3 to 4 (Week 43)
- Updated Raziel to accommodate changes to charybdis (Week 43)
- More testing comparing framecapture/seek time using ffmeg vs sharktopoda. Getting identical results is a critical feature for machine learning training. (Week 43)
- Create apps to view ML localizations directly in Sharktopoda for different use cases including: view all, filter by confidence, view as loaded into vars. Source code is at: (Week 44)
 - <https://github.com/mbari-org/m3-support/tree/main/src/main/scala/org/mbari/m3/support/apps/mlviz> (Week 44)
 - <https://github.com/mbari-org/m3-support/tree/main/src/main/scala/org/mbari/m3/support/etc/yolo> (Week 44)
- Working on a permanent archive for one off machine learning runs on video. Set up a plutus instance to archive output from the local ML service; both of which are running on maximilian (a GPU box). ATM, ML output will be stored in titan:/DeepSea-AIs (Week 45)
- Added code to allow for more types of filters when viewing ML output in Sharktopoda. (Week 45)
- Fixed an issue with viewing raw ML output in Sharktopoda where data sets with 100,000s of localizations would hang. (Week 46)
- Rewrote the ML loader, then loaded ML-generated annotations for dive V4464 into VARS. (Week 46)

- Fixed the map base layer used in the prototype Deep-sea Guide. ESRI retired the old one and turned it off. (Week 46)
- Investigating methods of using full ML track data to help annotators visualize and correct annotations. (Week 46)
- Added basic documentation for Sharktopoda, and vcr4j-remote. (Week 46)
- Switching doc generator to scaladoc for raziel and m3-support (Week 46)
- Shout out to Kevin Barnard for setting up Uptime Kuma for system monitoring. <http://rocinante.shore.mbari.org:3001/status/m3-prod> (Week 48)
- On going support for DSG, VARS (Week 50)
 - <https://github.com/mbari-org/vars-annotation/issues/168> (Week 50)
 - <https://github.com/mbari-org/vars-feedback/issues/84> (Week 50)

901221 - Midwater Time Series

- Ran merge between AUV metadata and VARS for i2MAP deployments. Investigating why this task is failing when run from a cron job on quasar. (Week 4)
- With Mike and Rob, resolved issues with the nav/ctdo data for i2MAP 20200210 (Week 5)
- Debugged an issue with some i2MAP annotations failing to merge with ancillary data. Root cause was i2MAP dives were misnamed creatively named on M3. Added logic to skip creative i2MAP names. (Week 24)
- Added video resolutions in the video asset manager for i2MAP videos records that were missing those. (Week 39)
- Ported some midwater transect analysis apps from the old VARS database to the current M3 db. (Week 39)

901618 - Pelagic-Benthic Coupling

- Started scaffolding a dedicated image annotation application that integrates with VARS. (Week 15)
- Started work on a new image annotation application, mondrian. Jim Barry's lab has an intern starting in June that can use this application, so Brian is trying to get this done ASAP. (Week 17)
- Made some small changes to annosaurus to better support image annotation applications. These changes have been published in version 0.14.1 and 0.14.3 (Week 17)
- Work is progressing on the new image annotation application, Mondrian. (Week 18)
- Continuing work on the new image annotation application, Mondrian. (Week 19)
- Alpha version of the new image annotation application, Mondrian, is ready for testing. (Week 21)
- Released windows builds of Mondrian and VARS Annotation (Week 22)
- Added automated image analysis (using machine learning via Pythia) to Mondrian (Week 22)
- Begun work on adding additional features requested by Jim Barry's lab to Mondrian (Week 23)
- Working on adding an association editor to Mondrian so users can add descriptive details to individual annotations. (Week 24)
- Work on association editor in Mondrian (Week 25)
- Released Mondrian v1.1.0 (VARS Image annotation app) (Week 26)
- Mondrian 1.1.2 was released. This is a bug fix release. (Week 28)
- Fixed Coral Observatory image sets that were registered in vampire-squid (video asset manager) with incorrect params. (Week 28)
- Setting up a non-core project for Station M data to be included in the main VARS database. (Week 46)

902002 - FathomNet

- Meeting w/ Kerry Howell to discuss adding an API to Smartar-id to allow FathomNet to use it as a naming service. (Week 3)
- FathomNet has an automated task that notifies image owners when an image link is broken. Fixed a bug so that notifications will stop being sent when the owner fixes the link. (Week 4)
- Staged labeled images to an external server for use in a FathomNet/Kaggle competition. (Week 4)
- Met with Megan Cromwell (NOAA) to walk through data archiving at NOAA. (Week 5)

- Packaged an image set for testing and developing a workflow to store images with NOAA's long term data archive. (Week 5)
- Working with NOAA on a data archiving workflow to allow external labs to publish images to FathomNet. Also providing feedback to NOAA on organizing their own data before submitting it to FathomNet. (Week 6)
- Met with Squiddle developers to address features needed for them to support FathomNet integration. Added the first round of requested features. (Week 6)
- Updated the FathomNet API with changes to support Squiddle. Updated the FathomNet web UI with features added by CVisionAI developers. (Week 6)
- Preparing for the upcoming FathomNet workshop. (Week 6)
- Much work on laying out the FathomNet beta 2.3 roadmap. (Week 7)
- Work on integrating branches of MBARI's knowledgebase with the WoRMS concept tree. (Week 7)
- Prepping for next week's FathomNet workshop. (Week 7)
- Met with the new Ocean Vision AI program manager, Tapas Dwivedi. (Week 7)
- FathomNet workshop (Week 8)
- Integrated the equipment/geological features branches of the VARS knowledge-base into our WoRMS server. These branches will get updated every month when we sync with WoRMS. (Week 10)
- Working on tasks in the beta-2.3 roadmap. (Week 10)
- Code review of Genevieve Patterson's fathomnet-qscp service. (Week 10)
- Wrestling with the "best" way to present search autocomplete. See <https://github.com/fathomnet/fathomnet-web-ui/pull/5> (Week 12)
- Revisiting work on resolving the import from VARS to FathomNet. The data pipeline was broken due to an "out of band" data load into VARS from an ML import. (Week 12)
- Updated FathomNet's firebase service (from Google) from a free tier to a paid tier that supports OpenID Connect. (Week 13)
- Met with NOAA team members to start implementation of hosting/archiving user contributed images. Also discussed archiving versioned snapshots of the FathomNet database. (Week 13)
- Met with Squiddle developers to continue the discussion of better FathomNet/Squiddle interoperation. (Week 13)
- Revisiting VARS to FathomNet export. (Week 13)
- In progress: replacing the default taxonomy provider. Currently the default in FathomNet is MBARI's knowledgebase but we're switching to our fast worms server. Notable changes includes limiting searchable terms to WoRMS taxa branches that exist as annotations in FathomNet and switching the browsable taxa tree to WoRMS. (Week 14)
- The FathomNet server VM has been upgraded to 4CPU and 8GB RAM. (Week 15)
- Added community features to the FathomNet API. (Find observations and verifications by users, List badges for a user) (Week 15)
- Met with OVAI team to debug SQL issues in fastapi-qcsp. (Week 15)
- Tested and deployed new release of the FathomNet web UI (1.0.3) (Week 15)
- Submitted an image collection to NOAA to test and develop a data archiving pipeline. (Week 18)
- One of the podman containers had debug logging enabled which filled up the disk on eione.mbari.org (aka fathomnet.org). This has been fixed. (Week 18)
- Addressing some FathomNet issues. (Week 19)
- With Kevin B, we've laid out an accelerated road map to complete Beta 2.3 in June (Week 19)
- New release of the worms-server to address issue #3 (Week 21)
- Testing version of FathomNet with new community features is at <https://fathomnet.org/testing> (Week 25)
- Reviewed Eric Orenstein's medium article on FathomNet 1.0. (Week 28)
- Met w/ Magda Balazinska to discuss their ML assisted video search research. Assembled a dataset of MBARI video and annotations for her students to test with. (Week 29)
- Migrating to Micronaut 4 (Week 35)
- Meeting with WoRMS team to discuss ML image analysis and integration. (Week 35)
- Meeting to review requirements for game content management system. (Week 35)
- Upgraded back end from Micronaut 3 to 4. (Week 36)

- Data fixes to support latest model training. (Week 45)

902304 - Piscivore Cam

- Met with Jared and Lonny to discuss video management for Piscivore. The video archive for these videos will be on titan:/M3/Projects/Piscivore (Week 10)
- Working out the video archiving workflow with Jared (Week 12)
- Wrote an app to stage Piscivore video to M3. (Week 13)
- Wrote code to register Psicivore videos with VARS. (Week 13)
- Working though staging pisicovre videos with ambiguous timestamps to our video asset manager. (Week 14)
- Spun up a new model server with a fish detector at <http://perceptron.shore.mbari.org:8082/> (Week 15)
- Piscivore video staging and video asset manager registration code is ready. Waiting for a network share fix in order to finalize the setup. (Week 17)
- The team fixed issues with time stamps on videos. Brian ran a dry-run import on the test video set. (Week 26)
- Wrote quick proof-of-concept to quickly apply ML analysis for piscivore videos. (auto-analyze.sc) (Week 26)
- Set up applications that automate moving/renaming piscivore files from atlas:/M3_Staging to titan:/M3/Projects/Piscivore and registering them in MBARI's video asset manager. (Week 29)
- Investigating issues with metadata extraction from Piscivore videos. (Week 35)
- Updated the code that migrates and renames videos from piscivore's staging area to the permanent archive on titan:/m3. It will now intentionally fail on a video if it can't extract a timestamp from the video's metadata. (Week 43)

902306 - SINKER

902308 - M3/VARS for the Masses

- Starting work on adding auto-generated OpenAPI docs to vampire-squid (Week 4)
- Testing out changes to remove technical debt from vampire-squid. (Week 17)
- Working on removing technical debt from MBARI's video asset manager, vampire-squid and improving documentation. (It's been in use for about 7 years). Updates include the heavy lift from Scala 2 to 3 and from javax.persistence to jakarta.persistence packages. Started work adding API docs using Tapir. (Week 23)
- Working on adding API docs to vampire-squid (Week 26)
- The video asset manager, vampire-squid, is being updated to address some performance issues, remove outdated frameworks, and add openapi docs. The in-progress branch is feature/vars4m. (Week 39)
- Continuing work on adding docs/tests/apidocs to the video asset manager, vampire-squid. Switched from eclipselink to hibernate as a JPA provider due to lazy loading issues. Implementing cross database testing (SQL Server, Postgresql, Oracle, Derby) using testcontainers. Postgres' handling of UUIDs is so weird. (Week 40)
- Adding integration tests to vampire-squid, video asset manager (Week 41)
- Added integration tests for target databases (Derby, SQL Server, Oracle, Postgresql) to the video asset manager. (Week 42)
- Working on expanding database specific integration tests for vampire-squid and annosaurus (Week 43)
- Restructured the video asset manager, vampire-squid, to allow for database specific integration tests. (Week 45)
- Added complete test coverage to vampire-squid (video asset manager) for Postgres and Sql Server databases. Added history/change tracking to vampire-squid databases. All APIs are available via openapi. Because this update requires schema changes, Brian will work with IS to set up a migration plan to the shore and ships. (Week 48)
- Working on backend of annotation service: <https://github.com/mbari-org/annosaurus/issues/18> (Week 50)

DQ2209 - Ocean AI 2

- Meeting with NSF project manager to demonstrate MBARI's video annotation and ML tools. (Week 14)
- Met with OVAI team to present details about MBARI's video annotation workflows. (Week 15)
- Presented MBARI's media and video asset management to Aurali Dade (NSF). (Week 15)
- There were a number of FathomNet releases last week. Added community features to the back end server allowing users to follow topics of interest (concepts, people, and geographic regions) and to retrieve an activity stream of those topics. Working on email notifications summarizing the topics a user follows. See #54, #65, and #111 (Week 22)
- Worked with Erin Butler at CVisionAI to enable FathomNet users to subscribe to topics of interest (such as types of animals, people or geographic regions) and view the activity stream for those topics. (Week 24)
- Improvements to activity stream APIs for FathomNet (Week 25)
- Working on community features for FathomNet. See <https://fathomnet.org/testing> for the development site. (Week 26)
- Investigation into supporting Chinese, Arabic, etc names in the FathomNet database. <https://github.com/fathomnet/fathomnet-rest-api/issues/18> (Week 26)
- Meeting to review QSCP "user journey" (Week 32)
- Upgraded the fathomnet-rest-api from Micronaut 3 to 4. (Week 37)
- Deleting some types of data was failing (not cascading properly). This is fixed now. (Week 37)
- Created a copy of a subset of the FathomNet database, with non-public info removed, for Angus Forbes, a researcher at Purdue. His team is going to look at using LLMs to generate SQL from natural language queries. (Week 37)
- Working on functional requirements for the FathomNet/MSU/NOAA image archiving pipeline. (Week 37)
- Modified the vars-to-fathomnet import pipeline to address a number of data sync challenges. Canvassed the video lab to verify that the current crop of localizations in VARS are ready for export to FathomNet. I'll be running the export today. (Week 37)
- Pushed VARS data to FathomNet; the most recent push was about 24,000 images. (Week 39)
- Fix to a newly introduced bug that caused requests for data pages to drop the `totalCount` field. (Week 39)
- Having discussions with NOAA about the proposed data hosting pipeline for FathomNet (Week 39)
- Discussion with the team and Paul Rogers to have Paul start work on the games' content management system. (Week 40)
- Investigating a bug, introduced during an upgrade, that broke the endpoint for modifying image data. This is a blocker for generating local training sets for ML. (Week 44)
 - Bug is fixed. (Week 44)
 - Running `validate-images` to populate width and height on images with missing dimensions. (Week 44)
- Added support for integration testing against SQL Server on M1 macs. (tl;dr SQL Server does not run native on M1 via docker, but Azure SQL Edge does) (Week 44)
- Deployed a model Lonny trained on all of FathomNet's data, known as the 'meg[alodon]' detector externally for testing at <http://fathomnet.org:7777/> (Week 46)
- Meeting with Paul Rogers to discuss CMS development. (Week 46)
- Setting up VM in DMZ to support CMS app and a postgres db. (Week 46)
- OVAI team and I met with Ocean Networks Canada to discuss collaborations with FathomNet. (Week 46)
- Set up a production and development postgres database. There's a nightly cron job that generates a backup of the production db and loads it into the development db. (Week 48)
- An NGINX proxy is set up for the CMS application. <https://ovai.mbari.org/cms/> (Week 48)
- Some support to help Ocean Networks Canada submit an image set to FathomNet. (Week 48)
- Meeting with Ocean Networks Canada to give overview of annotation/ML pipeline (with Kevin B and Kakani) (Week 50)

Out of Office

- Jan 3 - 11 - Vacation

- Feb 27 - Mar 3 - Vacation (Backpacking Haleakala so not internet)
- Feb 27 - Mar 3 - Vacation (Backpacking Haleakala so no internet)
- Jul 28 - Aug 6 - Vacation
- May 8 - 16 - Out of office
- Mar 28 - Apr 3 - Out of office
- Apr 12 - Apr 17 - Out of office
- Apr 12 - Apr 18 - Out of office
- Jun 16 - 20 - Out of office
- Jul 3 - 7 - Tentatively out of office
- Aug 14 - 17 - Vacation
- Aug 21 - 22 - Vacation
- Sep 20 - Oct 13 - Working remotely
 - Bumped into Kurt Buck at the Port Angeles farmer's market.
- Sep 20 - Oct 10 - Working remotely
- Oct 11 - 13 - Out of office traveling
- Oct 30 - ??? - Jury duty

Overhead

- Wrote 2023 work plan (Week 4)
- Meeting with Jennifer Durden and Timm Schoening about forming a Marine Imaging Society (Week 4)
- Discussions with Bill Kirkwood about forming an IEEE Marine Imaging Technical Committee. (Week 5)
- Prepping commons library for publication to maven central. (Week 5)
- Met with Timm Schoening and Jennifer Durden to discuss details about forming a formal Marine Imaging Society. Brian brought them up to date with the formation of an IEEE technical committee on Marine Imaging (with the helping hand of Bill Kirkwood). (Week 10)
- IS will be upgrading the production databases from SQL Server 2016 to SQL Server 2022. Reviewed the release notes for potential upgrade problems. The most notable is that all database connections will be encrypted, this might break existing applications. Neil will set up a testing database at foggy.shore.mbari.org to help with sanity checks. (Week 10)
- Met with Sara Beery and gave a tour of MBARI's video lab, annotation and image ML tools. (Week 11)
- Met with Kakani and Bill Kirkwood to discuss hosting a Marine Imaging Workshop in 2024 (Week 11)
- Peter Walker updated the docker driver on m3, nexus, portal, singularity, and quasar. Brian reloaded the docker containers and restarted all services. (Week 12)
- Virtually attended Oracle's DevLive Java day. (Week 12)
- Met with Bill Kirkwood and Kakani to discuss hosting a Marine Imaging Workshop in 2024. (Week 14)
- Responded to IS' request for info for a security audit for servers in MBARI's DMZ. (Week 15)
- Started gathering info from past Marine Imaging workshops to help organize one in 2024 (Week 17)
- With Bill Kirkwood, toured the Monterey Conference Center as a possible venue for the 2024 Marine Imaging Workshop (Week 17)
- DARC had issues with one of their VARS docker containers. This has been fixed. (Week 18)
- Published, commons, a library of shared Java/Scala utilities to Maven Central (Week 18)
- Helping the Coastal Research Institute (CORI in Egypt) spin up M3/VARS. (Week 21)
- Updated DARC's VARS stack. Addressed an issue that was filling up their disk space. (Week 21)
- Introduced and reviewed the new image annotation app, Mondrian, with Jim Barry's lab. Their intern will start using it soon. (Week 23)
- Setting up a permanent image repository for the Coral Observatory and registering the images in VARS so they can be analyzed/annotated. (Week 23)
- For Jim Barry's lab, wrote a small app to register images in VARS from the Coral Observatory (Week 24)
- Meet with Vineeth Balasubramanian to give an overview of how we are using machine learning to analyze video and images. (Week 24)
- Addressed issues with DARC's VARS installation (Week 25)

- Soliciting assistance for organizing and running the 2024 Marine Imaging workshop (Week 25)
- Tour for an ROV summer camp group. (Week 26)
- Proposals (Week 28)
 - Current stats on video asset data volume for the VARS proposal. Current estimate is 29,961 hours of video managed by the video lab. By platform: (Week 28)
 - Doc Ricketts: 8,619 hours (Week 28)
 - i2MAP: 200 (Week 28)
 - Mini ROV: 519 (Week 28)
 - Tiburon: 6,938 (Week 28)
 - Ventana: 13,684 (Week 28)
- Tour for ROV summer camp group (Week 28)
- Proposals (Week 35)
- Phase 2 resource leveling (Week 36)
- Sat in for Kevin G for the phase 2 resource leveling. (Week 37)
- Attended NOAA's online machine learning workshop. (Week 39)
- Set up the web site for the 2024 Marine Imaging Workshop at <http://miw2024.org>, will turn on SSL later today. Thanks to Bill Kirkwood for putting together the web pages. (Week 43)
- The website for the 5th Marine Imaging Workshop at <https://miw2024.org/> is up and running. Make sure you share it widely! (Week 45)
- Involved in video shoot Wednesday. (Week 45)
- Purged old logs from titan:/devops. You can too ... script is here (Week 45)
- Working with Kakani and Bill to get the marine imaging workshop rolling along. (Week 46)
- Started discussions with Jennifer Durden about setting up the science committee for the marine imaging workshop. (Week 46)
- Updated Marine Imaging Workshop website at <https://miw2024.org/> (Week 50)