

DQ2209 - Ocean AI 2

Week 51

1. Brian Schlining
 - a. Support for server/proxy at <https://ovai.mbari.org>

Week 50

1. Brian Schlining
 - a. Meeting with Ocean Networks Canada to give overview of annotation/ML pipeline (with Kevin B and Kakani)

Week 49

1. Kevin Barnard
 - a. Continued support for CMS development

Week 48

1. Brian Schlining
 - a. 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.
 - b. An NGINX proxy is set up for the CMS application. <https://ovai.mbari.org/cms/>
 - c. Some support to help [Ocean Networks Canada submit an image set](#) to FathomNet.

Week 46

1. Kevin Barnard
 - a. Supported CMS planning & development
2. Brian Schlining
 - a. 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/>
 - b. Meeting with Paul Rogers to discuss CMS development.
 - c. Setting up VM in DMZ to support CMS app and a postgres db.
 - d. OVAI team and I met with Ocean Networks Canada to discuss collaborations with FathomNet.

Week 44

1. Brian Schlining
 - a. 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.
 - i. Bug is fixed.
 - ii. Running `validate-images` to populate width and height on images with missing dimensions.
 - b. 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 42

1. Kevin Barnard
 - a. Defined requirements for FathomVerse Content Management System (CMS) development

- b. Fixed all broken builds and runtimes of HF spaces in FathomNet model zoo

Week 40

1. Kevin Barnard
 - a. Discussed FathomVerse CMS development timeline
2. Brian Schlining
 - a. Discussion with the team and Paul Rogers to have Paul start work on the games' [content management system](#).

Week 39

1. Kevin Barnard
 - a. Ran OVAI Programmer Working Group meetings
 - b. Gave OVAI-wide FathomNet product update
2. Brian Schlining
 - a. Pushed VARS data to FathomNet; the most recent push was about 24,000 images.
 - b. Fix to a newly introduced bug that caused requests for data pages to drop the `totalCount` field.
 - c. Having discussions with NOAA about the proposed [data hosting pipeline](#) for FathomNet

Week 38

1. Kevin Barnard
 - a. Led OVAI PWG discussion 9/20

Week 37

1. Kevin Barnard
 - a. Set up CI/CD semantic versioning and release for fathomnet-py
 - b. Tacked several fathomnet-py issues
 - c. Met with Open World Object Detection folks
 - d. Discussed LLM integration for FathomNet querying via natural language
2. Brian Schlining
 - a. Upgraded the fathomnet-rest-api from [Micronaut 3 to 4](#).
 - b. Deleting some types of data was failing (not cascading properly). This is fixed now.
 - c. 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.
 - d. Working on functional requirements for the FathomNet/MSU/NOAA [image archiving pipeline](#).
 - e. 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 36

1. Kevin Barnard
 - a. Described greenfield development tasks for FathomVerse Content Management System (CMS)

Week 35

1. Kevin Barnard
 - a. Scoped FathomVerse CMS functional requirements

Week 34

1. Kevin Barnard
 - a. Continued user storyboarding process

Week 33

1. Kevin Barnard
 - a. Prepared content for FathomNet AI/MBA volunteer workshop

Week 32

1. Brian Schlining
 - a. Meeting to review [QSCP](#) “user journey”

Week 30

1. Kevin Barnard
 - a. QSCP retrospective/planning discussion

Week 29

1. Kevin Barnard
 - a. Hosted OVAI-PWG discussions
 - b. Started migration of model zoo to Hugging Face

Week 28

1. Kevin Barnard
 - a. Coordinated OVAI PWG meeting

Week 26

1. Kevin Barnard
 - a. CVPR conference; presentation, workshop
 - b. Prepared program-wide product update
2. Brian Schlining
 - a. Working on community features for FathomNet. See <https://fathomnet.org/testing> for the development site.
 - b. Investigation into supporting Chinese, Arabic, etc names in the FathomNet database. <https://github.com/fathomnet/fathomnet-rest-api/issues/18>

Week 25

1. Brian Schlining
 - a. Improvements to activity stream APIs for FathomNet

Week 24

1. Brian Schlining
 - a. 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 23

1. Kevin Barnard
 - a. FathomNet backend development, frontend support
 - b. Supported QSCP development; planned MVP experiments

Week 22

1. Kevin Barnard
 - a. QSCP support, documentation
2. Brian Schlining
 - a. 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 21

1. Kevin Barnard
 - a. Collected unlabeled image dataset for QSCP from Kakani's dives
 - b. Ran OVAI programmers working group discussions
 - c. Scoped and planned efforts for FathomVerse MVP/QSCP experiments

Week 20

1. Kevin Barnard
 - a. Led discussion with OVAI Programmers Working Group

Week 16

1. Kevin Barnard
 - a. Rewrote codebase for QSCP using PostGraphile

Week 15

1. Kevin Barnard
 - a. Supporting work for QSCP service
2. Brian Schlining
 - a. Met with OVAI team to present details about MBARI's video annotation workflows.
 - b. Presented MBARI's media and video asset management to Aurali Dade (NSF).

Week 14

1. Kevin Barnard
 - a. NSF program director visit
2. Brian Schlining
 - a. Meeting with NSF project manager to demonstrate MBARI's video annotation and ML tools.

Week 3

1. Kevin Barnard
 - a. Put together example image datasets for game developers