

902002 - Fathomnet Detect and Classify

Week 49

1. Kevin Barnard
 - a. Participated in the Ocean Vision AI game brainstorming workshop (12/8/2021)
 - b. Added some features to the VARS integration of gridview
 - i. Sorting by ROI color, dimensions, etc
 - ii. Query combination UI
 - c. Implemented requested extra filters to fathomnet-generate script

Week 48

1. Kevin Barnard
 - a. Wrote tool to generate custom ML training datasets from FathomNet data: fathomnet-generate
 - b. Working on feature requests to the VARS integration of gridview
2. Brian Schlining
 - a. Meeting with various potential external stakeholders

Week 46

1. Kevin Barnard
 - a. Developed COCO dataset generation script using fathomnet-py API
 - b. Reviewed FathomNet Nature paper
2. Brian Schlining
 - a. Reviewed FathomNet Nature paper.
 - b. Discussions with NOAA about having NOAA archive 3rd party images for a long time (75 years).

Week 44

1. Brian Schlining
 - a. Wrote an [application to trim black letterboxes](#) off of images in FathomNet and reposition the localizations on the corrected image. All images in FathomNet have now had any black/border edges trimmed off.

Week 40

1. Brian Schlining
 - a. [FathomNet](#) went live last week. Release announcement on Twitter is [here](#) and Medium is [here](#).
 - b. Addressing questions and feedback from external users.
 - c. Fixed issue with embargoed info for all types of Ctenophores.
 - d. Fixed issue with attribution for each image in its thumbnail preview
 - e. Edits and feedback to Kevin Barnards' [article](#) on his FathomNet Python API.
 - f. FathomNet community feedback is setup on GitHub at <https://github.com/fathomnet/community-feedback>

Week 39

1. Brian Schlining
 - a. Working on loading [WoRMS](#) into a [vars-kb-server](#). This is to support global taxonomies in FathomNet. Repo at <https://github.com/fathomnet/fathomnet-worms>

- b. Testing and running code from Kevin Barnard to crop off the black letterboxing found in some images in M3/VARS. [Modified the sync tools](#) between M3/VARS and FathomNet to choose annotations on the cropped images over the letterboxed images.
- c. Prepping for FathomNet's release on Sep 30th. Working on notifications to users (e.g. send welcome email, successful contribution, etc). Fixing a million final nits.
- d. Setup model hosting on fathoment website. You can put models in `smb://atlas.shore.mbari.org/FathomNet/web/models` which will be publicly available at <http://fathomnet.org/static/models/>.
- e. Dropped all data in FathomNet and reloaded localizations from M3/VARS

Week 37

1. Brian Schlining
 - a. Spinning up clean development environment. Had to wipe, rebuild, recreate database volumes and everything after changes from latest docker policy updates.
 - b. Setup download of WorMS database. Investigating loading the data into a VARS knowledgebase to integrate with FathomNet.

Week 34

1. Brian Schlining
 - a. Working through remaining issues and tasks before the September 30th release.
 - b. Supporting applications have been deployed to quasar.
<https://docs.mbari.org/internal/fathomnet-validator/>

Week 33

1. Brian Schlining
 - a. Working on a final round of issues and testing before releasing FathomNet on September 30th.
 - b. Fighting

Week 32

1. Brian Schlining
 - a. Split mono-repo into individual projects and moved code to private repos under <https://github.com/fathomnet>
 - b. Added developer documentation
 - c. Working on improvements for the September 30th release date.

Week 31

1. Brian Schlining
 - a. Published an [article on registering images in FathomNet](#)
 - b. Starting ramp down to FathomNet's public release scheduled for September 30th.

Week 28

1. Brian Schlining
 - a. Loaded metadata (image dimensions, checksum) for all images in FathomNet

Week 24

1. Brian Schlining
 - a. New article in [Marine Technology Society Journal](#)

Week 21

1. Brian Schlining
 - a. [Dumped all point annotations from the VARS_IMAGES database into CSV](#) and wrote a script to fetch and organize the related images for an upcoming intern project.
 - b. Fleshing out image set management in FathomNet.
 - c. Working on adding the display of altConcept (e.g. parts of an organism) in fathoment.
 - d. Reviewing code from Kevin Barnard for cropping and then registering letterboxed images in VARS.

Week 20

1. Brian Schlining
 - a. Brian has wiped the FathomNet database and is working on reloading the data from VARS. During the reload, two problems were discovered that Brian is working on.
 - i. Large loads were locking too many database tables. This caused the FathomNet website to hang and introduced lock contention which could result in loss of data during the load. That **should** be addressed [with this change](#).
 - ii. The complete object graph on loads is not always saved. DarwinCore and Tags objects may disappear. This is being investigated.

Week 19

1. Brian Schlining
 - a. Continued work on data synchronization between VARS and FathomNet

Week 18

1. Brian Schlining
 - a. [Merged temporary annotations database](#) used for `special` edits into master
 - b. [Coding up data embargoes](#) for FathomNet. There's some back and forth with various parties for clarification as the embargo requests are ... interesting.
 - c. Also working on [data synchronization](#) between VARS and FathomNet
 - d. [Generated](#) a [trimmed KB tree](#) for a publication graph.
 - e. Adding additional parameters (CTDO, altitude) to accepted FathomNet metadata.
 - f. [Published doc](#) on submitting data to FathomNet

Week 17

1. Brian Schlining
 - a. Working on merging temporary annotation database used for correcting localizations into the master database.
 - i. Also, fighting with Windows SQL tools/VM/VPN issues/endless updates as part of this.
 - b. Meeting with JAMSTEC

Week 14

1. Brian Schlining
 - a. Tested [gridview](#) against the VARS databases/services. Created [documentation](#) for gridview users.
 - b. Working through embargo and image watermark discussions with our team, management, and the video lab.
 - c. Working with Kakani on ways to [best visualize the VARS Knowledgebase](#) for a paper.
 - d. Fixed an issue with the [FathomNet](#) CSV parser.

Week 13

1. Brian Schlining
 - a. Testing latest version of [gridview](#)

Week 12

1. Brian Schlining
 - a. Meeting with Squiddle developers
 - b. Meeting with JAMSTEC
 - c. Updating [script to build custom taxa trees](#) for upcoming paper.
 - d. Working on aggregating updated data embargo requests and implementing them in order to publish “real” data to fathomnet.
 - e. Investigated issue that Linda Kuhnz was experiencing with starting VARS

Week 10

1. Brian Schlining
 - a. Telecon with Ariell Friedman, author of [Squiddle](#), about integration with FathomNet
 - b. Reviewed [first version of gridview](#) that works against M3/VARS

Week 9

1. Brian Schlining
 - a. [Merge external PR from CVisionAI](#)
 - b. Fixed issues in Vue/FathomNet: [Make links bookmarkable](#) and [Fix upload page links](#)
 - c. Met with groups from Geomar, BIIGLE, Dalhousie to introduce FathomNet and solicit image and data submissions
 - d. Responded to detailed information requests from National Geographic regarding data submissions, user experience, and data rights management in FathomNet. This is being done to clear legal hurdles for NGS to submit info to FathomNet.

Week 8

1. Brian Schlining
 - a. Reviewing and merging pull requests for mods to FathomNet from CVisionAI.
 - b. Discussions with groups about contributing image sets and using to FathomNet
 - i. Telecon with Benjamin Misiuk (U of Newfoundland, CA)
 - ii. Telecon with Blair Thornton (U of Southampton, UK)

Week 7

1. Brian Schlining
 - a. FathomNet release has been pushed out from Mar 1 to Mar 8. We’re waiting on an external contractor to finish a tool for bulk verifying image localizations.

Week 6

1. Brian Schlining
 - a. Fixed errors with data ingested from marineregions.org (Their errors, not ours)

Week 5

1. Brian Schlining

- a. Integrated data from marineregions.org's [REST API](#) into [FathomNet](#). This allows users to refine search results by geographic region names. [FAN-124](#)
- b. Added support for labeling organism parts (e.g. nectosome, head, etc) in FathomNet. [FAN-121](#)
- c. Organizing ramp-down to FathomNet's release. It's tentatively scheduled for March 1st but may be pushed out to time it's release with a FathomNet paper publication. [FAN-122](#)

Week 4

1. Brian Schlining
 - a. [Added change tracking](#) to fathoment database.
 - b. [Updated data column sizes](#) in preparation for public release.
 - c. Some web UI assets were being hosted by Make&Model servers. [Brian consolidated these into the Fathomnet repository](#) and updated the web UI to use them.
 - d. [Setting up an app to validate the existence of image assets](#) registered in FathomNet. This is needed as remotely hosted images may go offline.
 - e. Working through [how to accommodate organism parts](#) in FathomNet
 - f. Running a task to stage the latest localized image to FathomNet.

Week 3

1. Brian Schlining
 - a. Weekly meeting. Planning to release FathomNet publicly on March 1st.

Week 1

1. Brian Schlining
 - a. To accommodate limited time on the project, Brian submitted a request to Kakani for 2021 task priorities.