

Duane Edgington

Week 53

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
- Overhead
- Out of Office
 - AWS re:invent virtual conference Nov 30 - Dec 18
 - Neurips 2020 virtual conference Dec 6 - 12
 - Vacation Fri Dec 18, Dec 21 - 31

Week 52

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
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- 901618 - Pelagic-Benthic Coupling
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- 902005 - VARS Annotation Assistance
- Overhead
- Out of Office
 - AWS re:invent virtual conference Nov 30 - Dec 18
 - Neurips 2020 virtual conference Dec 6 - 12
 - Vacation Fri Dec 18, Dec 21 - 31

Week 51

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Plan to catch up on missed NeurIPS presentations
- 901618 - Pelagic-Benthic Coupling
 - Work to do to try to enhance images for calibration
 - Work to do to run Dan's program on in-air calibration images
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Team meeting Dec 10
 - Status meeting Dec 15
 - Update session with Danelle planned for this week.
- Overhead
 - Home internet outage (regional Monterey DSL) Dec 7 -15

- Home T-Mobile cellular MiFi adapter procured to mitigate outage
- Out of Office
 - AWS re:invent virtual conference Nov 30 - Dec 18
 - Neurips 2020 virtual conference Dec 6 - 12
 - Vacation Fri Dec 18, Dec 21 - 31

Week 50

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
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- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
- Overhead
- Out of Office
 - AWS re:invent virtual conference Nov 30 - Dec 18
 - Neurips 2020 virtual conference Dec 6 - 12
 - Vacation Fri Nov 20, Nov 23 - 25

Week 49

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - AWS CEO Andy Jassy presented new SageMaker features in his AWS re:Invent keynote presentation Tuesday Dec 1.
 - options for data preparation, building ML pipelines, and a feature store.
 - AWS re:invent sessions on EC2, DynamoDB, Amplify, serverless, Airflow DataPipelines Dec 2.
 - Nvidia DGX Station A100 AI appliance presentation Dec 2. Very cool, very expensive.
- 901618 - Pelagic-Benthic Coupling
 - Returning to analysis of calibration images and benthic transect images
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
- Overhead
 - Participated in “jury” of capstone presentations from University of Victoria ECE399 course projects. Of the 3 competing projects, one was MBARI proposed ROV LiDAR project. Dec 1.
- Out of Office
 - AWS re:invent virtual conference Nov 30 - Dec 18
 - Neurips 2020 virtual conference Dec 6 - 12
 - Vacation Fri Nov 20, Nov 23 - 25

Week 48

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Finished reviews for ICRAM 2021
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore

- 902005 - VARS Annotation Assistance
- Overhead
 - Engineering virtual meeting, Nov 24
- Out of Office
 - AWS re:invent virtual conference Nov 30 - Dec 18
 - Neurips 2020 virtual conference Dec 6 - 12
 - Vacation Fri Nov 20, Nov 23 - 25

Week 47

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Reviewing papers ICRAM 2021
- 901618 - Pelagic-Benthic Coupling
 - Running matlab Computer Vision Toolbox camera calibration code, writing some matlab, and running Dan's LaserMeasure code on images collected by Paul McGill on recent P-B C dive. So far so good. Attempting to increase the number of "good" images for calibration app by enhancing the images.
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Spinning up on Amplify and Vue on AWS.
- Overhead
- Out of Office
 - AWS re:invent virtual conference Nov 30 - Dec 18
 - Neurips 2020 virtual conference Dec 6 - 12
 - Vacation Fri Nov 23 - 25

Week 46

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Reading through recent few-shot learning papers
 - LeCun and others are planning special issue on learning with fewer labels for IEEE PAMI
- 901618 - Pelagic-Benthic Coupling
 - Paul is working on the benthic in-water checkerboard calibration frame grabs from recent station M cruise
 - Duane to run through Matlab vision toolbox calibration program when Paul has released the frame grabs.
 - Dan Davis has processed the in-air laser calibration images and reports that the calibration looks good.
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
- Overhead
 - Group meeting Nov 9
 - Dept zoom meeting Nov 10
- Out of Office
 - Out Weds Nov 11
 - Vacation Fri Nov 13.

Week 45

- 901009 - CANON

- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Reviewed papers for conference and workshop
- 901618 - Pelagic-Benthic Coupling
 - Matlab work with toolbox and calibration images
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
- Overhead
 - Group meeting Nov 2
- Out of Office
 - AWS 3 hour webinar Oct 29
 - Vacation Oct 30

Week 44

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
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- 901618 - Pelagic-Benthic Coupling
 - With Paul McGill installed 3-laser laser measure system on Doc Ricketts, and captured in-air calibration images. Images have been corrected and calibration performed.
 - Using matlab to perform in-water calibration of images from ROV video of checkerboard pattern.
 - Updated matlab to 2020b on matlab mac system.
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Continuing AWS SageMaker Studio work with Danelle on tfEfficientDet detector/classification code
 - Successfully ran multi-epoch spot training (70% cost saving over on-demand run)
- Overhead
 - Engineering department zoom meeting
 - Refreshing knowledge of matlab programming
 - Reviewing papers for upcoming Underwater Image Analysis workshop IAPR CVAUI
 - Reviewing papers for ICPRAM 2021
- Out of Office .

Week 43

- 901009 - CANON
 - Sent Brent Jones notes and links to github documentation on STOQS to facilitate CPF data load into STOQS.
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
- 901618 - Pelagic-Benthic Coupling
 - Running matlab computer vision toolbox camera calibration app on images of checkerboard taken on recent Pelagic-Benthic cruise to debug algorithm and evaluate performance
 - Preparing to calibrate 3 laser system on Doc Ricketts with Paul McGill Thurs-Mon Oct 22-26 for upcoming station M cruise. Pre-cruise Covid-19 test on dock Thurs Oct 22 9AM.
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Working on tfefficientdet detector/classifier to run on AWS SageMaker Studio

- Overhead
 - Group meeting Oct 19.
- Out of Office .

Week 42

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
- 901618 - Pelagic-Benthic Coupling
 - Green light to purchase MatLab Computer Vision Toolbox and maintenance ASAP to support analysis of recent dive footage
 - Plan to do analysis as soon as license is available.
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - ~Daily work sessions with Danelle.
 - Running training jobs on AWS SageMaker Studio.
 - Coming up to speed on Spot instance use (saves cost, 70% in my experiment) for ML training.
- Overhead
 - Group meeting Oct 12
 - Reviewed paper for *Fisheries Research*
- Out of Office
 - Vacation Oct 16.
 - Oct 14. Watched webinar from RedHat on Containers, Kubernetes, Open Shift, Red Hat training opportunities. .

Week 41

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Working through Amazon SageMaker text
 - Webinar Oct 7: MLOps and Reproducible ML on AWS with Kubeflow and Amazon Sagemaker
 - Webinars Oct 4: AWS Summit Online Americas. SageMaker Studio and more.
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Successful 1 epoch training trials of deepsea-efficientdet model (Danelle's docker image) with voc_crop_896x896 image crops (and 512x512 image crops) in SageMaker Studio. Collected training time and AWS cost statistics. Interfaced with WANDB and SageMaker artifact reporting and plotting. Learning how to control costs in SageMaker Studio...
- Overhead
 - Oct 7 Webinar: Intel Real Sense L515 worlds smallest Hi-resolution LiDAR camera. Very cool.
 - Oct 2: Group Meeting
 - Oct 6: Dept Meeting
- Out of Office
 - Vacation Oct 9.
 - Oct 6. Watched the keynote of Nvidia GTC 2020 (running now, free registration). Amazing capabilities and product developments.

Week 40

- 901009 - CANON
 - Virtual meeting Sept 24
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - AWS Summit session Sept 29 (Latest SageMaker Studio features)
 - Working through SageMaker Studio Debugger
 - Learning TensorFlow 2
 - NOAA AIASI monthly telecon Oct 5
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
- Overhead
 - From Docker Straight to AWS webinar Sept 30
 - Board bullets submitted
 - MBARI seminar (NOAA) Set 23
- Out of Office

Week 39

- 901009 - CANON
 - Project meeting Sept 17
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Working through SageMaker Studio evaluation / training
- Overhead
 - Group meeting Sept 21
 - Seminar Sept 23
- Out of Office
 - Sept 24 Vacation

Week 38

- 901009 - CANON
 - Meeting Sept 17
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Work on accessing M3 prores files. Thanks to IS, we now have a mount point to titan M3 on our dev-box.
 - Uploaded "calpoly" mezzanine and prores file to AWS S3
 - Exploring AWS SageMaker Studio
- Overhead
 - Engineering meeting Sept 15

- Out of Office

Week 37

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Continuing exploration of FewShot learning -- tracking, self-supervised learning
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Exploring Metaflow, Cortex tools with Danelle
- Overhead
 - Sept 9 seminar NOAA: Sunburst Sensors: Oceanographic Instrumentation from Montana to Mauritius
 - Sept MBARI biweekly seminar
 - Sept 10 group meeting
- Out of Office
 - Sept 11. Vacation

Week 36

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Participating in ECCV 2020 workshops and attending tutorials. Several were recorded but not available live, so watching those posted workshops this week.
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
- Overhead
- Out of Office
 - Aug 22 - 28. ECCV. Virtual conference. Workshops, tutorials and presentations.
 - Sept 4. Vacation

Week 35

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Emails regarding phase 1 response
 - Attending targeted ECCV presentations, tutorials, workshops
- 901618 - Pelagic-Benthic Coupling
 - Emails to Dan Davis and with Paul McGill
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Gearing up for Metaflow experiment
 - Reviewing AWS materials
 - Team meeting Aug 20 included phase 1 response discussion and preparation.
- Overhead
 - Ken Johnson seminar, engineering telecom, group meeting

- Out of Office
 - Aug 22 - 28. ECCV. Virtual conference. Workshops, tutorials and presentations.

Week 34

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Preparing for ECCV FewShot learning tutorial Saturday, and reading ECCV FewShot papers. Very active ECCV topic.
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Team meeting Aug 20. Work on Phase 2 proposal.
 - Spin up [Metaflow](#) framework -- workflow candidate
- Overhead
 - Group meeting
 - Weekly NOAA AI initiative Workshop teleconference Thursdays.
 - Lunchtime reading AWS: IAM and VPN and EC2.
- Out of Office
 - Aug 21. Vacation.
 - Aug 22 - 28. ECCV. Virtual conference. Workshops, tutorials and presentations.

Week 33

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Telluride Neuromorphic Engineering Workshop. Virtual. Aug 3-7 lectures and discussions. Aug 13 - Sept 11 team implementation projects. One project team is focusing on few-shot and on-line learning.
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
 - Reading AWS Developer Guide on Authorization and Security
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Tri-weekly intern meetings. Presentation Aug 12.
- Overhead
 - Group meeting, department meeting. Intern presentations.
- Out of Office
 - Aug 3 - 7. Telluride Neuromorphic Engineering Workshop. Virtual.
 - Aug 14. Vacation.
 - Aug 23 -28. ECCV. Virtual conference. Workshops, tutorials and presentations.

Week 32

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Telluride Neuromorphic Engineering Workshop. Virtual. 8Am - noon each day this week.
 - Returning to one-shot exploration. Experimenting with a MAML implementation.
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa

- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Tri-weekly intern meetings.
- Overhead
- Out of Office
 - Aug 3 - 7. Telluride Neuromorphic Engineering Workshop. Virtual.
 - Aug 23 -28. ECCV. Virtual conference. Workshops, tutorials and presentations.

Week 31

- 901009 - CANON
 - Updated my STOQS development environment. Thanks, Mike M. for help on the needed modifications.
- 901602 - Data TAG: Addrss Eng Chng
 - Proposal reading comments to Kevin G.
- 901603 - Video TAG: Vis Ocean Chng
 - Proposal reading.
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Intern teleconferences
- Overhead
 - Returned to "Learn Docker in a month of lunches" book over noon hour.
- Out of Office
 - Friday July 31. Vacation.
 - Aug 3 - 7. Telluride Neuromorphic Engineering Workshop. Virtual.
 - Aug 23 -28. ECCV. Virtual conference. Workshops, tutorials and presentations.

Week 30

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
 - Reading proposals
- 901603 - Video TAG: Vis Ocean Chng
 - Reading proposals
 - July 12-18. ICML. Virtual conference.
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Project tasks
- Overhead
- Out of Office
 - Friday July 24, July 31.
 - July 12-18. ICML. Virtual conference.
 - Aug 23 -28. ECCV. Virtual conference. Workshops, tutorials and presentations.

Week 29

- 901009 - CANON
 - Team meeting
- 901602 - Data TAG: Addrss Eng Chng
 - Proposal review

- 901603 - Video TAG: Vis Ocean Chng
 - Proposal work
 - Attending ICML virtual conference Sunday July 11 - Sat July 18.
 - Fabulous tutorial on Representation Learning with labels (i.e. learning features without labeling) from DeepMind. I have the [slide set](#); the 3 hour tutorial was recorded, but the recording is not yet released...
 - I am posting links to papers I think most interesting on the #machine-learning SLACK channel
 - The format of the main conference is a presentation for each paper, 15 minute pre-recorded lecture with slides and speaker view. All 1088 accepted papers are also available to attendees as pdf.
- 901618 - Pelagic-Benthic Coupling
 - Brief email exchange with Paul McGill coordinating for upcoming cruise.
- 901915 - Improving MBARI Data Impa
 - Proposal review
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Proposal review
 - On-going intern communications
- Overhead
- Out of Office
 - Friday June 26, July 10.
 - July 12-18. ICML. Virtual conference.
 - Aug 23 -28. ECCV. Virtual conference. Workshops, tutorials and presentations.

Week 28

- 901009 - CANON
 - Project meeting June 25, July 9. Experiment in July...
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Proposal writing.
 - Trying out open source code for few-shot image classification from CVPR 2020 paper [DeepEMD: Few-Shot Image Classification with Differentiable Earth Mover's Distance and Structured Classifiers](#)
 - [Reading paper on controlling misclassification error rates in marine automated taxa ID](#)
- 901618 - Pelagic-Benthic Coupling
 - Touched base with Paul McGill on 2020 plans, 2021 proposal
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
 - Touched base with Thom M. on 2021 proposal.
- 902005 - VARS Annotation Assistance
 - Validated M3 registration of MBARI2017 and SRI-Rockfish video files.
 - Informative zoom meeting with UCSC Leila Takayama, Henry Zhou on Human-HL interaction/infoviz
- Overhead
- Out of Office
 - Friday June 26, July 10.
 - July 12-18. ICML. Virtual conference.
 - Aug 23 -28. ECCV. Virtual conference. Workshops, tutorials and presentations.

Week 26

- 901009 - CANON
 - Project meeting scheduled for June 25. Experiment in July...
- 901602 - Data TAG: Addrss Eng Chng

- 901603 - Video TAG: Vis Ocean Chng
 - Wrapped up CVPR. Lots of great work on advanced video processing systems to follow-up.
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Intern Peyton is making great progress!
 - Team meeting scheduled for June 25.
- Overhead
- Out of Office
 - Vacation Monday June 22.
 - Vacation planned for Friday June 26.
 - June 14-19. CVPR. Virtual conference. Workshops, tutorials and presentations.

Week 25

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Attending Virtual CVPR 2020. Sunday June 14 - Friday June 19.
 - [1470 accepted papers, double blind peer reviewed](#)
 - ~7,000 virtual attendees. About 45 sessions over 3 days, 4 in parallel for 2 hours. Prerecorded 5 min (oral) or 1 min (posters) video presentations plus slides, paper, supplemental material. Speakers available for chat or zoom questions, answers, interactions during session period. Evening BOF zoom sessions. Even a daily [newspaper](#) ...
 - About 29 tutorials and about 64 workshops in parallel over 3 days. Zoom plus prerecorded.
 - Several workshops and many papers on zero-shot/one-shot/few-shot learning, continual learning, image/video enhancement, other relevant areas
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Meeting with Intern Peyton Lee Monday June 15. He is making great progress.
- Overhead
 - Group meeting June 15. Engineering meeting June 16.
- Out of Office
 - Vacation Monday June 22.
 - June 14-19. CVPR. Virtual conference. Workshops, tutorials and presentations.

Week 24

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
 - Read all 2021 abstracts. Feedback to project manager on relevant data TAG opportunities.
- 901603 - Video TAG: Vis Ocean Chng
 - NOAA AIASI monthly conference call Monday, June 8, 2020. Presentation on their exploration of AWS Sagemaker (using Sagemaker Groundtruth to do manual bounding box annotations of benthic images)
 - Read all 2021 abstracts. Feedback to project manager on relevant Video TAG opportunities.
 - Continue work exploring Few Shot learning algorithms.
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore

- Attended all 2021 abstract presentations June 10, including Planktivore.
- 902005 - VARS Annotation Assistance
 - Project kickoff with summer intern Peyton Lee. We will be planning 3x/week virtual meetups while he gets going.
 - Project status meeting June 11.
- Overhead
- Out of Office
 - Vacation Friday.
 - June 14-19. CVPR. Virtual conference. Workshops, tutorials and presentations.
 - Working through AWS Security training course.
 - NOAA AIASI monthly conference call Monday, June 8, 2020 12:30 PM - 1:30 PM.

Week 23

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Worked on 2021 project abstract
 - Reading through 130 pages of 2021 abstracts in prep for abstract presentations and feedback next week.
 - Continued work exploring one-shot/few-shot ML techniques, implementations, and papers
 - NOAA AIASI monthly conference call Monday, June 8, 2020 12:30 PM - 1:30 PM.
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
 - Contributed to 2021 project abstract
- 902005 - VARS Annotation Assistance
 - Explored Google Cloud Platform buckets and integration with CoLab environments. Works!
 - Intern Peyton Lee starts ~June 8
- Overhead
 - RedHat Developer DevNation presentations on [Kubernetes](#) Mon / Weds AM.
 - TechStrong Con Virtual Summit Thursday June 4. 6AM PDT.
- Out of Office
 - Vacation Friday.
 - June 14-19. CVPR. Virtual conference. Workshops, tutorials and presentations.
 - Working through AWS Security training course.
 - NOAA AIASI monthly conference call Monday, June 8, 2020 12:30 PM - 1:30 PM.

Week 22

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Continuing One-shot learning exploration: Metrics-based methods
 - Continued Nvidia GPU Tech Conference presentations (Jetson Xavier NX and Cloud integration).
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
 - Abstract input to Project Lead
- 902005 - VARS Annotation Assistance
 - Some preparation for intern Peyton Lee, including CoLab / Google Cloud exploration and setup info.
- Overhead
- Out of Office

- Vacation Friday.
- June 14-19. CVPR. Virtual registration at nominal charge for IEEE Life Members.
- Working through AWS Security training course.

Week 21

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Continuing One-shot learning exploration. Worked through Siamese Networks implementation and Matching networks implementation.
 - GTC Tech Conference returned with Tuesday-Thursday webinars on new NVIDIA products -- embedded edge products, datacenter hardware and software, new frameworks and tools.
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
 - Abstract preparation meeting planned.
- 902005 - VARS Annotation Assistance
 - Work continues on registering video files into M3. Needed to update the filenames to match creation_timestamp metadata
 - Weekly team meeting via teleconference. VideoLab presentations to UCSC folks.
 - Teleconference with 2020 intern Peyton Lee.
- Overhead
 - Engineering, group, teleconferences.
- Out of Office
 - Vacation Friday.
 - June 14-19. CVPR. Virtual registration at nominal charge for IEEE Life Members.
 - Working through AWS Security training course.

Week 20

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Continuing One-shot learning exploration
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
 - Abstract planning teleconference with project lead next week.
- 902005 - VARS Annotation Assistance
 - Work continues on registering video files into M3. Waiting for news that files have been moved to The Right Place on Titan...
 - Weekly team meeting via teleconference.
 - Teleconference scheduled with 2020 intern Peyton Lee.
- Overhead
 - Weekly Engineering teleconference
 - Weekly group meeting
- Out of Office
 - Vacation Friday.
 - June 14-19. CVPR. Virtual registration at nominal charge for IEEE Life Members.
 - Working through AWS Security training course.

Week 19

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Monthly teleconference with AIASI NOAA task team. Kitware presented a demo of a web based VIAME near ready for use. The system is built in Docker containers, so can be installed on any server. Maybe time to give VIAME another look.
 - Continuing One-shot learning exploration.
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Work continues on registering video files into M3.
 - Weekly team meeting via teleconference.
- Overhead
 - Group meeting.
 - NVIDIA webcasts.
- Out of Office
 - Vacation Friday.
 - June 14-19. CVPR.Virtual registration at nominal charge for IEEE Life Members.

Week 18

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Video conference call with Franz J. Kurfess (CalPoly), Lubomir P. Stanchev (CalPoly), Danelle regarding NSF *Convergence Accelerator: AI-Driven Innovation via Data and Model Sharing* call for proposals. That team is moving ahead with a Agriculture / Marine Fisheries proposal, with Danelle and Duane as advisors.
 - Returning to exploration of One-Shot learning
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Tasks on VAA-32 registering videos. Returning to docs and code examples.
- Overhead
 - Weekly engineering meeting April 28.
 - Kevin group meeting May 1.
- Out of Office
 - Internet outage at home April 27-28. Now OK...

Week 17

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Returning to exploration of One-Shot learning
 - Update to project manager on time allocation etc for 2020
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore

- Update to project manager on time allocation etc for 2020
- 902005 - VARS Annotation Assistance
 - Update to project manager on time allocation etc for 2020
 - Nvidia webinar on Virtual GPU technology and offerings April 22
 - Slack call with Danelle; status update and plan for this week's work
 - Project manager has called a group meeting Thursday April 23.
- Overhead
 - Engineering weekly zoom status meeting
 - Email to Doug Au regarding PUCK use in community
- Out of Office
 - Friday April 17 "touch base" zoom meeting

Week 16

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
- Overhead
- Out of Office
 - April 8-9: Vacation
 - April 13-15: Out sick

Week 15

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Participating in GTC conference on line March 24-April 10 (!). Live webcasts, pre recorded sessions and demos, poster sessions. I have posted links on Slack [machine-learning](#) channel.
 - NOAA Automated Image Analysis Strategic Initiative monthly telecon April 6. Continued work on VIAME by Kitware. Just releasing a web interface. Beginning to look like a solid capable tool.
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Continuing work with Danelle on taking video file, image, and annotation datasets that have been generated over the last few years and preparing them to register with M3.
- Overhead
 - Group meeting on SLACK, Engineering Zoom weekly info meeting.
- Out of Office
 - Yep. Sheltering in place. Last venture out of the house (except for quiet walks) March 27. Everyone is well.
 - Taking a 2 day vacation this week to rest, read, bake, garden... Tulips are blooming!

Week 14

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng

- Participating in GTC conference on line March 24-April 10 (!). Live webcasts, pre recorded sessions and demos, poster sessions. So far the sessions I have attended are very interesting, useful, and well done. Slides and recorded sessions are available within a few days after the session. I have posted links on Slack [machine-learning](#) channel.
- Looking forward to reviewing recent work and academic activity on unsupervised learning, recurrent feedback, uncertainty quantification, and adaptation which we will need for video processing in the future.
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
 - Team meeting
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Returning to Sprint with Danelle on taking video file, image, and annotation datasets that have been generated over the last few years and preparing them to register with M3.
- Overhead
 - Group meeting over Slack.
 - Engineering meeting. Thanks for making Zoom recording available.
 - Upgraded home workstation environment to enable better ergonomics and productivity.
- Out of Office
 - Yep. Sheltering in place. Last venture out of the house (except for quiet walks) March 27. Everyone is well.
 - [Nightly Met Opera Streams](#) free series of encore *Live in HD* presentations streamed on the Metropolitan Opera of New York website and apps (ROKU etc) during the coronavirus closure
 - This week wraps up the series. Ends Sunday.
 - [National Theatre Live](#) is planning similar weekly free broadcasts starting this Thursday.
 - James Corden in “*One Man, Two Guvnors*” (modern adaptation of “*A servant of two Masters*”) Tony Award-winning performance starts Thursday 2 April from 7pm UK time, for the much-loved National Theatre Live production, free to stream on YouTube for seven days.

Week 13

- 901009 - CANON
 - Project meeting March 12.
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
 - Participating in GTC conference on line March 24-27. So far the sessions I have attended are very interesting, useful, and well done. Slides and recorded sessions are available right after the session, and plan to be posted, along with other video presentations, for attendees and others in a few days. I will post links on Slack machine-learning channel once the open links are available.
- 901618 - Pelagic-Benthic Coupling
 - Mathworks Matlab Computer Vision System toolbox trial extended one month, to mid April
 - Waiting for input from Paul McGill regarding purchase. This may need to wait until we are back at Moss Landing.
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Participating in Sprint with Danelle on taking video file, image, and annotation datasets that have been generated over the last few years and preparing them to register with M3.
 - Coordinate work over Slack, BitBucket, and M3 stack running on Digits-dev-box-fish (server running at MBARI Moss Landing). Jupyter notebooks, Python.
 - Brian, Danelle great to work with over slack (text and audio chats)!
- Overhead

- Slack / Zoom group, engineering meetings.
- Paper that I reviewed for MCPI *Sensors* was recently published [Jellytoring: Real-Time Jellyfish Monitoring Based on Deep Learning Object Detection](#)
- Out of Office
 - Yep. Sheltering in place.
 - [Nightly Met Opera Streams](#) free series of encore Live in HD presentations streamed on the Metropolitan Opera of New York website and apps (ROKU etc) during the coronavirus closure
 - This week is all Wagner, one per evening. Whew.

Week 12

- 901009 - CANON
 - Francisco, C. Scholin, and team met for a Project meeting March 12 in the Pacific Forum. I have notes. Francisco asked me after meeting if ODSS, STOQS, etc were good to go.
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
- 901618 - Pelagic-Benthic Coupling
 - Mathworks authorized a one month extension on Matlab Computer Vision Toolkit trial license so I could continue evaluation and demonstration.
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
 - Next step: figure out how timecodes in images are handled in SPCCConvert and Taxonify.
- 902005 - VARS Annotation Assistance
 - Danelle is leading us in Sprint to do VAA-32 Ingest localized images
 - Cloned repository into working directory on digits-dev-box-fish. Working over VPN through steps outlined by Brian S. and Danelle.
- Overhead
 - Gathered laptops and files and books and references from office March 15.
 - Set up a home office with laptops and stuff. So far so good.
 - Webinar "How to scale Kubernetes in AWS" March 18
 - Webinar "Cloud Backup Service" from NetApp March 19
- Out of Office
 - Yep. Sheltering in place.
 - [Nightly Met Opera Streams](#) free series of encore Live in HD presentations streamed on the Metropolitan Opera of New York website and apps (ROKU etc) during the coronavirus closure
 - Next week is all Wagner, one per evening. Whew.

Week 11

- 901009 - CANON
 - Project meeting March 12.
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
- 901618 - Pelagic-Benthic Coupling
 - Camera calibration results presented to Jim Barry by Paul McGill. At decision point on Matlab toolbox purchase.
- 901915 - Improving MBARI Data Impa
 - Project working session
- 902004 - Planktivore
 - Built SPCCConvert on Windows10. Issue with testing images (from IFCBS) posted to GitHub.
 - Next step: figure out how timecodes are handled in SPCCConvert and Taxonify.
- 902005 - VARS Annotation Assistance

- Reviewed summer intern applicants. Prioritized list of applicants sent to George et al.
- Successfully built an environment to do SageMaker model training locally while utilizing SageMaker infrastructure transparently. This allows easy decision of local vs cloud data, local vs cloud model training, and local vs cloud deployment without code changes or drama.
- Overhead
 - Working through *Learn Docker in a month of lunches* book
 - Reviewed interesting paper on Automated Instrument Integration Scheme (using PUCK and other technologies!) for Ocean Observatories, for MDPI *Sensors* Journal.
- Out of Office

Week 10

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
- 901618 - Pelagic-Benthic Coupling
 - Evaluated captured calibration images for DiSCO Coral Observatory Camera deploying this week using trial MathWorks Computer Vision Toolbox App. In water calibration ran smoothly; results to be presented to Jim Barry this week.
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
 - Built clone of github repository for Taxonify application; successfully built backend system (celery, mongodb, rabbitmq, swagger editor and ui, gunicorn,...). Next step is to hook it up to Taxonify UI and populate with some test images.
- 902005 - VARS Annotation Assistance
 - Reviewing summer intern applicants.
- Overhead
 - Lunch-time training: Kafka overview.
- Out of Office

Week 9

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
- 901618 - Pelagic-Benthic Coupling
 - Assisted Paul McGill & Alana in capturing calibration images for DiSCO Coral Observatory Camera (to deploy next week)
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Continued work on implementing MLFlow workflow on SageMaker with Conda3 kernel jupyter notebook
 - Exploring SageMaker Studio and SageMaker Debugger (new AWS tools in Preview)
- Overhead
 - Attended ER prep meeting
 - Attended ER presentations Weds Morning.
- Out of Office

Week 8

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng

- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Working on implementing MLFlow workflow on SageMaker with Conda3 kernel jupyter notebook
 - Tasked with loading FathomNet frames into VARS
- Overhead
- Out of Office

Week 7

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
- 901618 - Pelagic-Benthic Coupling
 - Duane is experimenting with Matlab toolboxes (one on trial from Mathworks, another opensource from Caltech) applied to calibrating checkerboard targets underwater.
- 901915 - Improving MBARI Data Impa
 - Weekly meeting; lunchtime learning session on centralized logging with Elastic Stack.
 - Productive meeting with VideoLab (the whole lab) on requirements and use cases.
- 902004 - Planktivore
 - Continuing work to build Taxonify backend on windows 10 system. Front end running; work to do on configuration.
- 902005 - VARS Annotation Assistance
 - Continuing work on integration of MLflow into AWS. Cloud9 and shared environments are cool!
 - Next step, configure a workflow in SageMaker...
- Overhead
- Out of Office

Week 6

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng
- 901603 - Video TAG: Vis Ocean Chng
- 901618 - Pelagic-Benthic Coupling
 - Paul has identified a [paper](#) on camera calibration for Dan and Duane to read
- 901915 - Improving MBARI Data Impa
 - Team meeting
 - Training session on Logging and Monitoring in AWS
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Demonstrated serverless deployment of ML model for inference in AWS environment via [Chalis \(Lambda\)](#)
 - Weekly VAA working session Monday Feb 3
 - Continuing work on integration of MLflow into AWS
 - Working on draft schematic diagram of VAA components and dataflow
- Overhead
- Out of Office

Week 5

- 901009 - CANON
- 901602 - Data TAG: Addrss Eng Chng

- 901603 - Video TAG: Vis Ocean Chng
 - Team to address project library space utilization.
- 901618 - Pelagic-Benthic Coupling
- 901915 - Improving MBARI Data Impa
 - Project meeting scheduled for Thursday Jan 30.
- 902004 - Planktivore
- 902005 - VARS Annotation Assistance
 - Project “kick-off” meeting held Tues Jan 28.
 - Duane presented status of SageMaker exploration
 - Weekly VAA working session Monday Jan 27
 - Demonstrated integration of MLflow with Sagemaker
 - SageMaker Docker image model creation in MLflow
 - Model upload from MLflow to AWS Elastic Container Registry (ECR)
 - Create SageMaker Model Inference Endpoint
- Overhead
- Out of Office