

901603 - Video TAG: Vis Ocean Chng

Week 51

1. Duane Edgington
 - a. Plan to catch up on missed NeurIPS presentations

Week 49

1. Duane Edgington
 - a. AWS CEO Andy Jassy presented new SageMaker features in his AWS re:Invent keynote presentation Tuesday Dec 1.
 - i. options for data preparation, building ML pipelines, and a feature store.
 - b. AWS re:invent sessions on EC2, DynamoDB, Amplify, serverless, Airflow DataPipelines Dec 2.
 - c. Nvidia DGX Station A100 AI appliance presentation Dec 2. Very cool, very expensive.

Week 48

1. Duane Edgington
 - a. Finished reviews for ICRAM 2021

Week 47

1. Duane Edgington
 - a. Reviewing papers ICRAM 2021

Week 46

1. Duane Edgington
 - a. Reading through recent few-shot learning papers
 - b. LeCun and others are planning special issue on learning with fewer labels for IEEE PAMI

Week 45

1. Duane Edgington
 - a. Reviewed papers for conference and workshop

Week 41

1. Duane Edgington
 - a. Working through Amazon SageMaker text
 - b. Webinar Oct 7: MLOps and Reproducible ML on AWS with Kubeflow and Amazon Sagemaker
 - c. Webinars Oct 4: AWS Summit Online Americas. SageMaker Studio and more.

Week 40

1. Duane Edgington
 - a. AWS Summit session Sept 29 (Latest SageMaker Studio features)
 - b. Working through SageMaker Studio Debugger
 - c. Learning TensorFlow 2
 - d. NOAA AIASI monthly telecon Oct 5

Week 37

1. Duane Edgington
 - a. Continuing exploration of FewShot learning -- tracking, self-supervised learning

Week 36

1. Duane Edgington
 - a. Participating in ECCV 2020 workshops and attending tutorials. Several were recorded but not available live, so watching those posted workshops this week.

Week 35

1. Duane Edgington
 - a. Emails regarding phase 1 response
 - b. Attending targeted ECCV presentations, tutorials, workshops

Week 34

1. Duane Edgington
 - a. Preparing for ECCV FewShot learning tutorial Saturday, and reading ECCV FewShot papers. Very active ECCV topic.

Week 33

1. Duane Edgington
 - a. 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.

Week 32

1. Duane Edgington
 - a. Telluride Neuromorphic Engineering Workshop. Virtual. 8Am - noon each day this week.
 - b. Returning to one-shot exploration. Experimenting with a MAML implementation.

Week 31

1. Duane Edgington
 - a. Proposal reading.

Week 30

1. Duane Edgington
 - a. Reading proposals
 - b. July 12-18. ICML. Virtual conference.

Week 29

1. Duane Edgington
 - a. Proposal work
 - b. Attending ICML virtual conference Sunday July 11 - Sat July 18.
 - i. 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...
 - ii. I am posting links to papers I think most interesting on the #machine-learning SLACK channel

- iii. 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.

Week 28

1. Duane Edgington
 - a. Proposal writing.
 - b. 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](#)
 - c. [Reading paper on controlling misclassification error rates in marine automated taxa ID](#)

Week 26

1. Duane Edgington
 - a. Wrapped up CVPR. Lots of great work on advanced video processing systems to follow-up.

Week 25

1. Duane Edgington
 - a. Attending Virtual CVPR 2020. Sunday June 14 - Friday June 19.
 - b. [1470 accepted papers, double blind peer reviewed](#)
 - c. ~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](#) ...
 - d. About 29 tutorials and about 64 workshops in parallel over 3 days. Zoom plus prerecorded.
 - e. Several workshops and many papers on zero-shot/one-shot/few-shot learning, continual learning, image/video enhancement, other relevant areas

Week 24

1. Danelle Cline
 - a. Abstract reviews
2. Duane Edgington
 - a. 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)
 - b. Read all 2021 abstracts. Feedback to project manager on relevant Video TAG opportunities.
 - c. Continue work exploring Few Shot learning algorithms.

Week 23

1. Danelle Cline
 - a. Project abstract review
2. Duane Edgington
 - a. Worked on 2021 project abstract
 - b. Reading through 130 pages of 2021 abstracts in prep for abstract presentations and feedback next week.
 - c. Continued work exploring one-shot/few-shot ML techniques, implementations, and papers
 - d. NOAA AIASI monthly conference call Monday, June 8, 2020 12:30 PM - 1:30 PM.

Week 22

1. Duane Edgington

- a. Continuing One-shot learning exploration: Metrics-based methods
- b. Continued Nvidia GPU Tech Conference presentations (Jetson Xavier NX and Cloud integration).

Week 21

- 1. Duane Edgington
 - a. Continuing One-shot learning exploration. Worked through Siamese Networks implementation and Matching networks implementation.
 - b. GTC Tech Conference returned with Tuesday-Thursday webinars on new NVIDIA products -- embedded edge products, datacenter hardware and software, new frameworks and tools.

Week 20

- 1. Duane Edgington
 - a. Continuing One-shot learning exploration

Week 19

- 1. Duane Edgington
 - a. 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.
 - b. Continuing One-shot learning exploration.

Week 18

- 1. Duane Edgington
 - a. 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.
 - b. Returning to exploration of One-Shot learning

Week 17

- 1. Duane Edgington
 - a. Returning to exploration of One-Shot learning
 - b. Update to project manager on time allocation etc for 2020

Week 15

- 1. Duane Edgington
 - a. 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.
 - b. 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.

Week 14

- 1. Duane Edgington
 - a. 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.

- b. 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.

Week 13

- 1. Duane Edgington
 - a. 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.

Week 5

- 1. Duane Edgington
 - a. Team to address project library space utilization.