

901603 - Video TAG: Visualizing Ocean Change

Week 43

1. Duane Edgington
 - a. Registered for [NeurIPS2021](#) (virtual, Dec 6 - 14)

Week 42

1. Duane Edgington
 - a. Working through CoLaboratory and TensorFlow 2 implementations
 - b. Checked RAID status on DevBox. All up and running, though one disk weak with multiple bad sectors. Replacement drives ordered.

Week 41

1. Duane Edgington
 - a. Sent Mandy project slides for board meeting as requested.
 - b. Registered with George M. interest in summer interns 2022.

Week 36

1. Duane Edgington
 - a. Working through learning Colaboratory (mounting google drive, etc). And PyTorch.
 - b. Working through Vision Transformer implementation on Colab
 - c. Phase 1 response to MT.

Week 34

1. Duane Edgington
 - a. IJCAI 2021 workshop on Long-tailed distribution learning, Outlier detection, and on Continual semi-supervised learning, Aug 19-20. Some excellent presentations. Very relevant to our large unbalanced data streams (like species abundance seen in video).
 - b. Work on phase 1 MT feedback.

Week 32

1. Duane Edgington
 - a. Calls with AWS grant team Aug 11, Aug 5.

Week 30

1. Duane Edgington
 - a. Reading 2022 proposals

Week 29

1. Duane Edgington
 - a. Starting to read 2022 proposals

- b. Very relevant tutorials and workshops at ICML 2021 (virtual) on Self-Attention (Transformer) applied to Video and Images, which can provide improved accuracy, performance, scaling and robustness compared to SOTA CNN networks, and on Self-supervised and Long-tail data distribution solutions.

Week 28

- 1. Duane Edgington
 - a. Project proposal
 - b. NOAA AIASI conference call Jul 12, 2021

Week 27

- 1. Duane Edgington
 - a. Worked on 2022 proposal
 - b. Work on long-tail distribution analysis algorithm evaluation
 - c. Reading papers from CVPR 2021

Week 26

- 1. Duane Edgington
 - a. Working on 2022 project proposal

Week 25

- 1. Duane Edgington
 - a. Attending CVPR (virtual) conference. Workshops on Tracking, Video, and self-supervised techniques
 - b. Continuing exploration of VISSL framework, including SEER and DINO implementations

Week 24

- 1. Duane Edgington
 - a. Working through FAIR ViSSL framework and open implementations of self-supervised learning systems for vision.

Week 21

- 1. Duane Edgington
 - a. Read 2022 Abstracts. Attended abstract presentations. Feedback provided.

Week 19

- 1. Duane Edgington
 - a. ICLR workshop on weakly-supervised learning techniques

Week 16

- 1. Duane Edgington
 - a. Reading Barlow Twins: Self-Supervised Learning via Redundancy Reduction and LeCun's The Energy-Based view of Self-Supervised Learning [GTC S33268]

Week 15

- 1. Duane Edgington
 - a. Relevant presentations during GTC conference. Following up on GLOM and Barlow Twins.

Week 14

1. Duane Edgington
 - a. NOAA AIASI monthly telecon April 5. Benjamin Woodward from CVIision gave a presentation on their system implementation for analysis of benthic video transects conducted by NOAA NMFS RV Henry B. Bigelo ("Bigelo cruise"). NOAA team evaluating Cloud Strategy (Randy Cutter and colleague Sam Woodman) presented their evaluation of GCP sandboxes.

Week 13

1. Duane Edgington
 - a. Studying paper and code on self-supervised learning method [Barlow Twins](#)

Week 12

1. Duane Edgington
 - a. Reading recent work from Facebook AI on unsupervised learning technique Barlow Twins

Week 11

1. Duane Edgington
 - a. Reviewed intern 2021 candidates, and sent selection to George M.
 - b. Will review intern applicants from CSUMB when their applications are available
 - c. Reviewing papers with code of recent research publications

Week 9

1. Duane Edgington
 - a. Reviewing recent few-shot learning papers
 - b. Monthly NOAA teleconference March 1. Huge amount of activity using ML within NOAA fisheries science centers.

Week 1

1. Duane Edgington
 - a. Returning to NeurIPS 2020 and AWS re:invent sessions that I missed