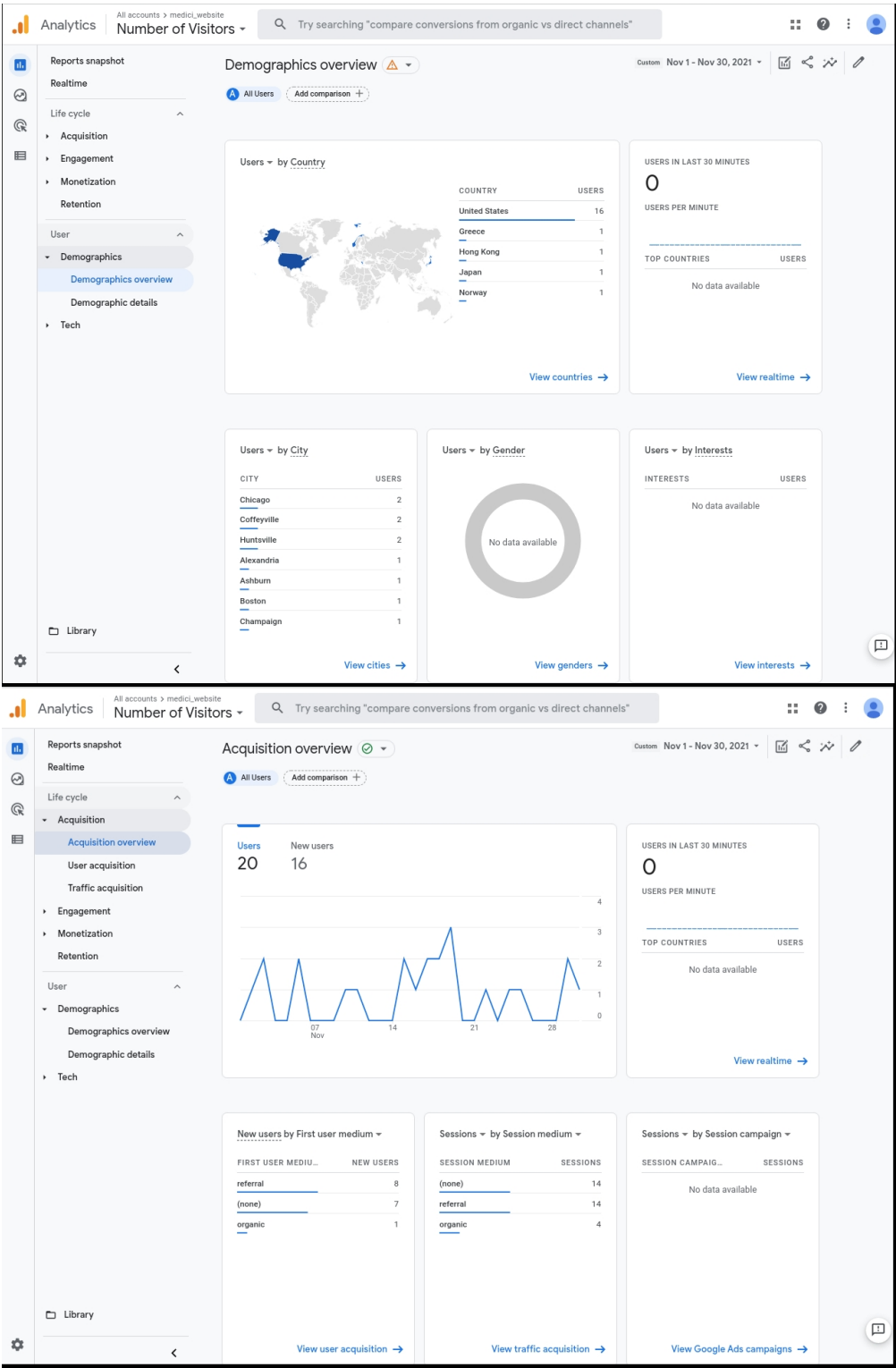# 2021-11 Monthly Status Report

Google Analytics Report:

Activities completed this month
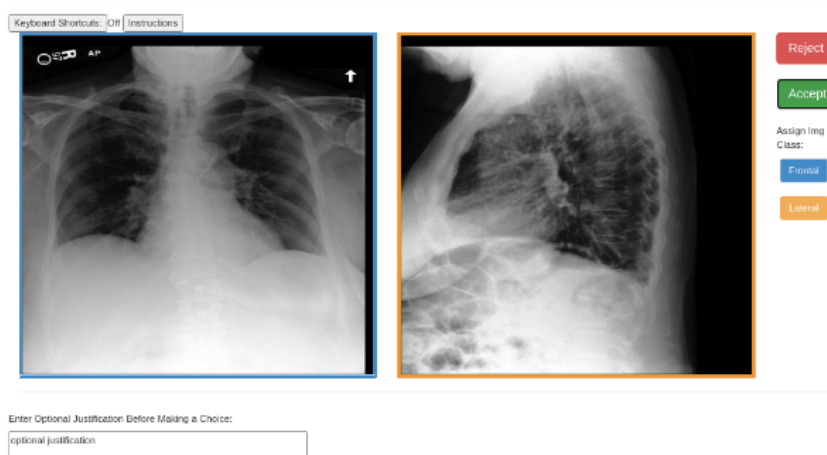
- The BMMR2: Breast Multiparametric MRI for prediction of NAC Response challenge has 3 submissions so far.

Download CSV | Download all submissions on leaderboard

#	User	Entries	Date of Last Entry	Team Name	< Rank > ▲	AUC ▲	wCV ▲	Detailed Results
1	tmearnest	9	11/30/21	SimBioSys	2.500	0.881 (1)	0.000 (4)	View
2	OscarPV	4	11/24/21		2.500	0.803 (2)	0.027 (3)	View
3	vivixinzhi	6	11/13/21	Cai's Radiomics Team	2.000	0.746 (3)	0.665 (1)	View

- MIDRC work is picking up:
    a. MIDRC - we are getting azure credits to deploy MedICI with docker submissions. Should be this month (November) - Still hasn't happened (12.9.2021)
    b. I've been working to really make the image comparator code neat and organized. I want this project designed in a way that make additional features easy to add. I believe I've achieved that
    c. The addition of a new app that allows a unique pairwise classification has been added to the app for the MIDRC project specifically. This feature allows two images to be displayed by patient and the goal is to use this to figure out which studies by patient have both a lateral and frontal chest xray. It's a test for Challenge 0 (practice docker submission challenge). So basically this app will allows us to find studies with both a good frontal and lateral xray so that we can create a ground truth to give to challenge participants for Challenge 0. The goal is to have participants create an AI algorithm that can correctly identify frontal and lateral chest xrays. If this challenge goes well then more complex questions will be raised and a challenge built around those questions will be formulated.

    d.

- DAIR Digital Breast Tomosynthesis Cancer Detection Challenge - Phase 2 (DBTex2) - Dr. Mateusz Buda has reached out about a potential data problem for the test phase. I have send the code and data I used and we are working to make sure the challenge results from participants are accurate.Will be in touch with him over the next couple days to make sure everything is in order.
- Tested new github commits to the codalab framework code. They have merged in code that was porting the proiect to python3 (previously I was doing this on my own). It still has some issues. Will keep monitoring it so we can get an updated codalab base for our projects.

Planned for next month

- MIDRC Challenge 0 which will feature docker submissions as well as the Image Comparator app and a jupyter notebook for annotator analysis. - Still waiting on credits for Azure use.
- Jayashree has me collaborating with Steve Piper (sponsored collaborator) who has built a way to make OHIF (medical imaging viewer) talk to a database called couchdb. This is a nosql record style database that the app I'm buillding for MIDRC is based on. The plan is to integrate OHIF into this app and be able to launch beside codalab and MedICI in general. This would allow ePAD and caMicroscope like functionality with more flexibility as well. Progress on this will come soon as I dive in.
- Figure out how to add a phase to a challenge (SPIE specifically with Dr. Mazurowski but maybe others as well).
- Resecure DL Sparse certificate

Paused

1. Continue getting CodaLab running on NCI's network and VMs:
   a. Issues:
      i. Credentials for AWS bucket not active and we cannot talk to the bucket. Need to reach out to Tony Bigham (tony.bigham@nih.gov) to get those refreshed.
      ii. On my local machine I deployed the updated CodaLab code and tried connecting to my own S3 bucket instance. I noticed that there is a javascript error making the request to the bucket. I need to setup up a similar but more simple setup to figure out how to upload data to s3 via javascript http requests so that I can trouble shoot the error on NCI's system and or mine. If we could use Azure, this might be resolved.

Meeting	Date
Bi-weekly Meeting #1	19 Nov 2021
Bi-weekly Meeting #2	

Milestones

Description	Date
MIDRC app complete and allows for flexible annotation of images for ground truth generation	29 Nov 2021

Task in Progress

Description	Status	Creation Date	Close Date
• Troubleshooting a javascript http request to Amazon AWS S3 bucket (paused for a bit)	Paused	31 Aug 2021	

Risks

Description	Mitigation	Rank	Status	Creation Date	Realization	Close Date
Continuous development of CodaLab on NCI's network is exposing bugs in deployment and or CodaLab itself. This isn't an issue in theory, but I don't know how many issues I'll need to correct in order for the system to work. It is hard to estimate time to completion as a consequence.	Kevin Olexa and I are working together to address each as they come up.	1	In Progress	23 Jul 2021		