

2021-02 Monthly Status Report

Activities completed this month

1. Added Okta as supported feature in MedICI GitHub and website (About Page: <https://www.medici-challenges.org/about>).
2. Added DL Sparse View CT Challenge to MedICI website (About Page: <https://www.medici-challenges.org/about>).
3. Launched the DL Sparse view challenge: <http://dl-sparse-view-ct-challenge.eastus.cloudapp.azure.com/>
4. Wrapped up the SPIE-AAPM Breast Challenge and collect final scores for the challenge organizers.
5. Add support link and message regarding using the api for image and metadata downloads.
6. Got a version of codabench to launch locally on my laptop. Codabench is the new and improved codalab. I still need to launch the miccai challenge on it to test it out.
7. Investigated Kheops and am finishing the report.
8. Finished creating the MedNIST sample challenge on COVID-Kubernetes deployment and addressed some bugs listed below:
 - a. FIXED: In results table the "FILENAME" is always "trackingid", needs to be the image that was submitted.

#	SCORE	FILENAME	SUBMISSION DATE	S
1	---	tag_mednist_inference	02/11/2021 18:08:43	F
2	---	tag_mednist_inference	02/11/2021 18:19:17	F

- b. FIXED: Image Uploads are slow and we need to address that. The solution we chose was to upload instructions for building an image and have it built on our server and then push it. Before we were sending 6+GB over HTTP. That was slow. Now we only send a couple MB and then we can build the image and send at much faster speeds.

Images:

1. iris_docker_image_submission
2. mednist_docker_image

To Upload an image, first save to *.tar.gz or *.tar format:

```
$ docker save repo/image:tag | gzip > image_name.tar.gz
```

or

```
$ docker save repo/image:tag > image_name.tar
```

Upload Image:

No file chosen

Upload to host progress:

Delete Image:

- c. NOT FIXED: Sometimes deleting an image from the repo changes the image upload html and I have to reset it. This shouldn't happen. This is quite elusive and I haven't spent a ton of time on it. It's really east to reset so it should never fully break the platform, but I do need to reset it every once in a while. I imagine this will become annoying over time and especially weekends.

9. Setup DL-sparse-view CT Grand Challenge:

UPDATE: I have a site setup: <http://dl-sparse-view-ct-challenge.eastus.cloudapp.azure.com/>



DL Sparse View CT challenge

Organized by AAPM.Organizing.Committee - Current server time: March 1, 2021, 7:32 p.m. UTC

First phase

March 17, 2021, midnight UTC

End

May 31, 2021, midnight UTC

TO DO: Upload scoring program and figure out data hosting situation.

Planned for next month

1. Continued ascertaining the validity of v2 codalab (codabench). I honestly haven't had too much time because of the covid challenge platform. I did get it to launch but there are some issues. I plan to get it all ready and deployed with the MICCAI challenge from last year. Once I have that we can scan it on the NCI platform and run challenges there. Deploy "develop" branch of codabench code to see if it is farther along and more bug free.



2. Kheops report finalized and request meeting with developers.
3. Investigate getting VPN via: <https://service.cancer.gov/ncisp>

Comments

Things that went well:

Things that could be improved:

Meeting	Date
Bi-weekly Meeting #1	04 Feb 2021
Bi-weekly Meeting #2	18 Feb 2021

Milestones

Description	Date
<ul style="list-style-type: none"> Fixed Image Upload Problem 	01 Jan 2021
<ul style="list-style-type: none"> COVID challenge plan-a is up and working 	15 Jan 2021

Task

Description	Resolution	Status	Creation Date	Close Date
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Risks

Description	Mitigation	Rank	Status	Creation Date	Realization	Close Date
Ingress service in Kubernetes is not behaving like the standard tutorials or documentation	Keep plugging away to find the correct configuration	1	closed	23 Oct 2020	Azure has inconsistent docs on how to set this service up. 01 - 06 - 2021: Patrick's new changes worked out the kink.	06 Jan 2021
Challenge taking too long to setup. People are worried about it failing to materialize	We really need a solid deployment of this architecture on Azure. Basic functionality is not working and some of the harder stuff is still being developed.	1	closed	31 Oct 2020	Now that CodaLab has been deconstructed from its normal configuration (postgres as an azure service rather than container; codalab as a pod in kubernetes instead of container; codalab code in azure file shares rather than the host machine), getting all the pieces to talk to one another isn't working seamlessly yet. 01 - 06 - 2021: Plan b is in full swing	31 Jan 2021
Scoring program not ready for the SPIE-AAPM challenge	I have drafted a preliminary white board thought process to understand the desired implementation. I have a couple questions, but could turn it into code if I had to.	2	Closed	30 Nov 2020	Scoring program works and is in place for Breast challenge.	01 Jan 2021