

# 2021-10-28 Meeting notes

## Date

28 Oct 2021

## Attendees

Name	Attended
Jayashree Kalpathy-Cramer	Yes
Ulli Wagner	Yes
Carolyn Klinger	Yes
Benjamin Bearce	Yes

## Currently supported challenges

Name of Challenge	Organization / Meeting	Medici instance used	Release Training data	Release Validation data	Release Test data	Number of Participants	Closing Date	Will the challenge remain open?	Comments
SPIE-AAPM-NCI DAIR Digital Breast Tomosynthesis Lesion Detection Challenge (DBTex)		<a href="http://spie-aapm-nci-dair.westus2.cloudapp.azure.com/competitions/4">http://spie-aapm-nci-dair.westus2.cloudapp.azure.com/competitions/4</a>  Phase 2 <a href="https://spie-aapm-nci-dair.westus2.cloudapp.azure.com/competitions/6">https://spie-aapm-nci-dair.westus2.cloudapp.azure.com/competitions/6</a>	14 Dec 2020	1/4/2021	1/15/2021	132 registrants 9 submissions	1/25/2021		Challenge completed. The validation phase remains open.
Deep-learning for inverse problems: sparse-view X-ray Computed Tomography image reconstruction	Emil Sidky (UChicago)	Here's a link for the Challenge description /rules/timeline: <a href="https://www.dropbox.com/s/ciqqba4xlxcn8x/DL-sparse-view-CT-challenge.docx?dl=0">https://www.dropbox.com/s/ciqqba4xlxcn8x/DL-sparse-view-CT-challenge.docx?dl=0</a>  Challenge Location: <a href="http://dl-sparse-view-ct-challenge.eastus.cloudapp.azure.com/">http://dl-sparse-view-ct-challenge.eastus.cloudapp.azure.com/</a>  Related to AAPM Annual meeting in July	3/17/2021	March 31, 2021	May 17, 2021	123 registrants	5/31/2021		2021/04/01  In validation phase  Ben & Emil are testing  Data are on an FTP server.  Ben set up an Azure container to download the data for two participants.

## Tasks / Deliverables

Task	Due Date	Deliverable	Status	
Support of at least new two challenges	8/30 /2021		<ul style="list-style-type: none"><li>• <a href="https://www.medici-challenges.org/">https://www.medici-challenges.org/</a><ul style="list-style-type: none"><li>◦ SPIE-AAPM-NCI DAIR</li><li>◦ DL Sparse View CT Challenge</li><li>◦ SPIE-AAPM-NCI-DAIR Phase 2</li><li>◦ Breast MRI prediction of NAC Response</li></ul></li></ul>	

Reopen three previously executed challenges	8/30 /2021		<ul style="list-style-type: none"> <li>• <a href="https://www.medic-challenges.org/">https://www.medic-challenges.org/</a> <ul style="list-style-type: none"> <li>◦ ISBI 2018</li> <li>◦ AAPM RT-MAC Challenge</li> <li>◦ MICCAI 2020</li> </ul> </li> </ul>	
Maintain and update the website	8/30 /2021			
<ul style="list-style-type: none"> <li>• Capturing and providing metrics on the use of the MedICI website</li> </ul>	8/30 /2021		Investigate Google analytics plug-in - DONE (2021/04/01)	
			391 page views, 107 users over the last 12 months	
<ul style="list-style-type: none"> <li>• Capturing and providing metrics on the challenges</li> </ul>	8/30 /2021			
Investigate the use of MedICI for federated learning challenges	01 May 2021	Report	<a href="https://docs.google.com/document/d/1v7Mz-diz8wSXzpdRGOGXwaDnZAOZ2t879frgTvzyt24/edit#heading=h.tqyuzeebfefeq">https://docs.google.com/document/d/1v7Mz-diz8wSXzpdRGOGXwaDnZAOZ2t879frgTvzyt24/edit#heading=h.tqyuzeebfefeq</a> <ul style="list-style-type: none"> <li>▪ need to understand what is meant by "federated learning"</li> <li>▪ review report</li> <li>▪ have a discussion with Keyvan</li> <li>▪ determine if MedICI is suited for support of federated challenges</li> <li>▪ if yes, what needs to be done to make it suitable</li> <li>▪ find time for discussion during the week of November 15</li> </ul>	
Investigate the integration of MedICI with Kheops	01 Feb 2021	Report	Presentation: <a href="#">NCI Imaging Informatics Webinar</a>  The recordings are towards the bottom of the page.  URL: <a href="https://kheops.online/">https://kheops.online/</a>  Draft: <a href="https://docs.google.com/document/d/1c20ny4UNWw4BTXhdFPmc3o0YG00toOndbkIXhc40Rqc/edit">https://docs.google.com/document/d/1c20ny4UNWw4BTXhdFPmc3o0YG00toOndbkIXhc40Rqc/edit</a>  The report was finalized on 08 Jul 2021	
Support the deployment of MedICI in NCI cloud environments	8/30 /2021		App scan found vulnerabilities, Ben fixed them, app needs to be tested with test cases that are provided by Codalab, Ben needs to familiarize himself with the test suite. Codalab needs to be app scanned again.  Codalab can connect to various storage places: Azure, AWS, GCP  2021/04/15 - NCI is hardening security which makes deployment much harder. NCI VMs are not allowed to talk to cloud environments. Kevin is investigating workarounds. The goal is to run an app scan.  Keyvan suggested trying a Codalab deployment on Google cloud outside of the NCI network. Keyvan will investigate.	

## Discussion items

Time	Item	Who	Notes
	Notes		
	Action items		
	Upcoming challenges		<ul style="list-style-type: none"> <li>▪ COVID challenge (Randy Gollub, Jayashree Kalpathy-Cramer)</li> </ul>
	Information sharing		
	Monthly status reports		add Monday NCI cloud email to the monthly status report
	NCI MedICI installation		CodaLab on AWS, Codalab's older version is still working, and some developers check-in code. The newer version (Python 3) had the last commit in August 2020. Deploying on a different cloud platform (AWS) and within the NCI environment is difficult.

	Contract / invoice status / SOW		<ul style="list-style-type: none"> <li>• Authorization to Proceed was issued, covers the month of September</li> <li>• Contract mod will follow</li> <li>• Invoice ending 8/30/2020 - in progress</li> <li>• Invoice 8/31/2020</li> <li>• Cost proposal for the new contract year: FNLCR will request a modification to the cost proposal - Done.</li> </ul>
	PIV card / GFE laptop / VPN		VPN access
	Paper		The draft will be submitted by September 15, 2020. - Not received
	Videos		<ul style="list-style-type: none"> <li>▪ Hold the work on the video for now</li> </ul>
	Strategy meeting		<ul style="list-style-type: none"> <li>▪ review paper</li> <li>▪ open challenges back up (contract / funding)</li> <li>▪ website</li> </ul>

## Action items