Meeting Minutes:

Date: September 27th, 2021

Problem:

- Create and automate a pipeline that pulls breast density studies from public and private clinics to a local PACS server for AI studies.
- **In basic terms:** Create and automate a stream of images from a medical server to a local server, where these images can then be used for analysis. These images also contain metadata that should be anonymized.

Meeting Summary:

- reusing the "Bden-StudyGrabber Program" and the "Bden-StudyMover Program"
- The process that needs to be improved is the transfer of DICOM images from the private clinics to BCCAPACS? Because currently, Dr. Rajapakshe has to manually move these studies (and delete them). So we should implement the "Bden-StudyGrabber" for this process
- Also, it was unclear in the thesis, is "Bden-StudyGrabber" a synchronous or asynchronous process? Can "Bden-StudyGrabber" be left on its own and be automatically downloading DICOM images as they appear on the BCCAPACS? Or is this the process we should implement
- We should also improve upon "Bden-StudyGrabber" to assign better random values and group DICOM images together (because different clinics can assign the same patient ID to different patients and the same patients can have different IDs)
- Tech stack is C# and .NET
- Should create Orthanc server. Create two Orthanc servers.
- Choose between relational and non-relational database, we get to chose this.

Weekly Actionable Items:

- Read “Data Anonymization and Management Pipeline for Validation of Volumetric Breast Density as an Imaging Biomarker for Predicting Breast Cancer Risk and Prognostication” by Yuhao Huang
- Setup Orthanc server
- Upload DICOM images to Orthanc server
- Download DICOM images from the Orthanc server
- Complete Orthanc Quick start guide