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Project Title: Automated Left Ventricular Segmentation

Time Log From 4/15/2024 - 4/21/2024

10 Hours Total

Date	Duration	Type	Description of completed work	Challenges and/or next steps
4/16	2 hours	Coding	I attempted to present the images and saw that the model was a bit sporadic in its predictions. As in there would be areas nowhere near the left ventricle that were being highlighted as if the left ventricle was there. I believe the weight value was a bit too high, or something is wrong with my model architecture.	Review the weighting method used on the minority 1s class and the model architecture.
4/17	4 hours	Coding	I realized the model architecture I had could be better, so I decided to change it and make it more modular. I read earlier in the semester a basic way to do it and spent breaking up the architecture. I wasn't able to retrain the model due to some GPU problems I was having.	Retrain the model with the new architecture and prepare images for Professor McNeil
4/18	3 hour	Debugging, Coding, Testing	I'm not sure what was happening with my GPU before, but the model did train on the images and I got very fruitful results as the predictions the model made were nearly identical to the true segmentations. Scores for both the training and validation sets were low. I visualized the predictions of the model on top of the true masks on an MRI	Prepare an email for Professor McNeil with the results
4/20	1 hour	Checking in	Sent Professor McNeil the results of the project	Clean up the notebook and any files and do the final demo

This Weeks Summary

I got the model to predict where the left ventricle is. I also prepared the results of what the model could do and sent it out to Professor McNeil. Now I just need to clean up the project a little and make it presentable for the final demo