CardiacSeg

List of Paper

- MaPLe: Multi-modal Prompt Learning - CVPR2023
- Segmentation with Shape Priors: A Review - TMI2024
- Learning with Explicit Shape Priors for Medical Image Segmentation - TMI2024
- Shape-Aware Deep Neural Networks for Biomedical Image Segmentation - ICCV2021
- Anatomically Constrained Neural Networks (ACNN): Application to Cardiac Image Enhancement and Segmentation - TMI2018

Timeline

Oct/30 Update:

- Results of SAM2 on 4 datasets
- Inspiration from MICCAI 2024 paper
- Purpose of cardiac segmentation in clinical application; applicable medical scenario

To be explored

- Purpose of cardiac segmentation in clinical application; applicable medical scenario
- MICCAI 2024 paper on SAM
- LORA on fine tuning
- Metric that measure accuracy for edges
- CT set with normal patients (no CHD)
- Feasible method for shape prior for anatomically aware block
- Design of loss function to add shape constraint in the training loop

Experiments to be done

- SAM2 on four datasets
- Comparison Test:
  - MedSAM
  - MedSAM2
  - SAM

Finished Experiments