

Faster Segmentation of Cardiac MRI using U-Net

Abstract-

The project deals with multiclass medical image segmentation to make a pixel level classification of the left ventricle endocardium (LV), left ventricle myocardium (Myo), right ventricle endocardium (RV), and background from MRI scans. Such techniques are useful for automating the process of diagnosing and differentiating between normal case, heart failure with infarction, dilated cardiomyopathy, hypertrophic cardiomyopathy, abnormal right ventricle by cardiologists. We use U-Net architecture which is essentially used for medical image segmentation and hope to devise a technique for automation of MRI diagnosis which requires less data for training and still produces sufficient accuracy(IOU or Dice are the metrics used in case of segmentation).

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