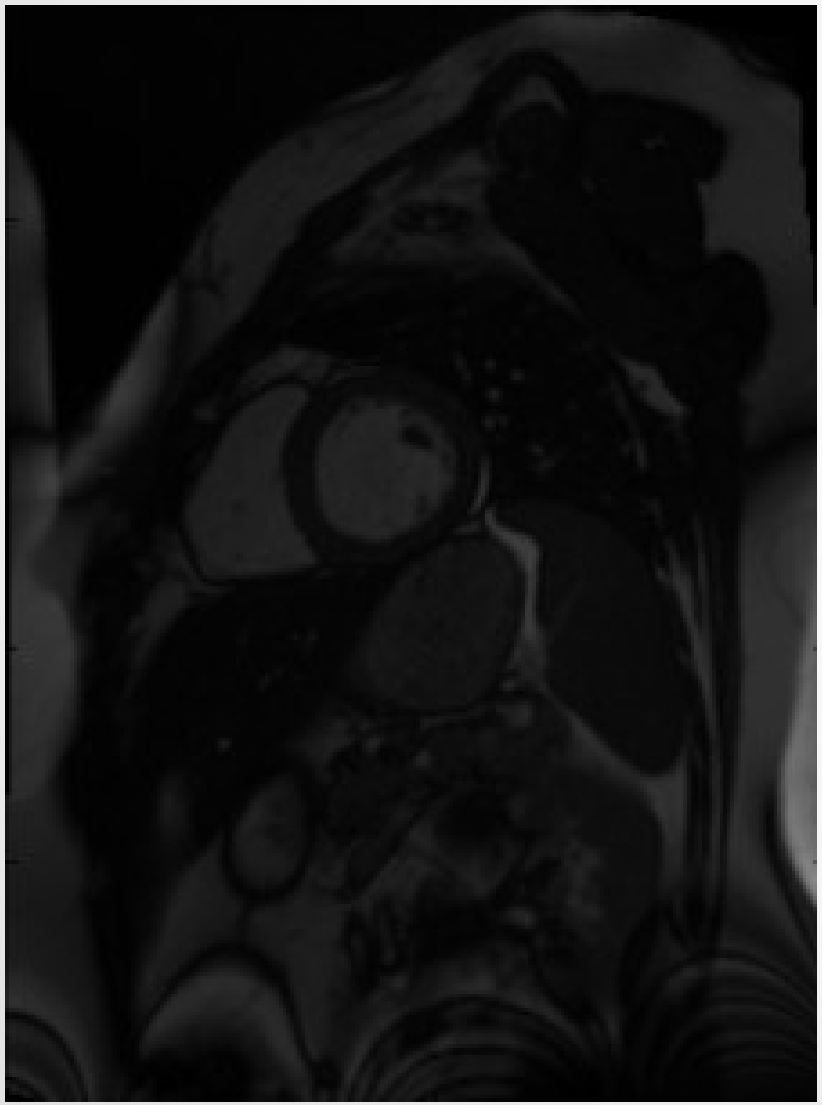
MRI Cardiac Segmentation for the Left Ventricle

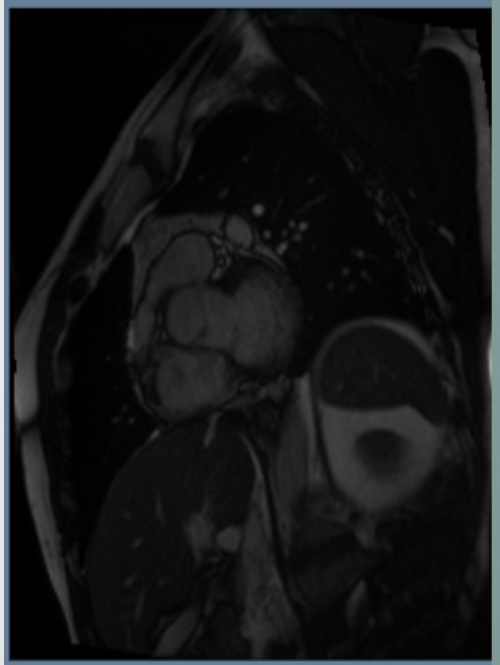


Jonathan Lacombe
REU in Computer Vision
University of Central Florida
Working with:
Ali Mortazi & Dr. Bagci
Week 8

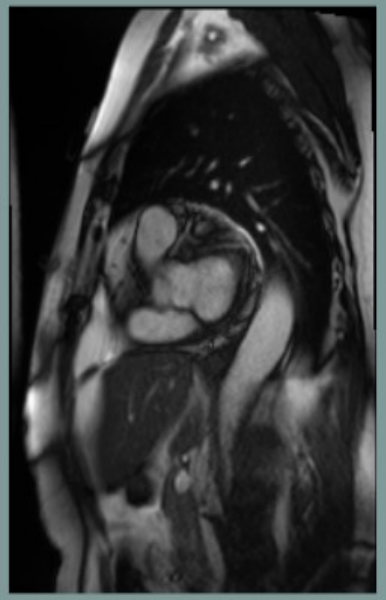
Progress

- Retrained Autoencoders and Mondrian Forest on preprocessed denoised and standardized images
- Visualized weights and reconstruction of Autoencoders

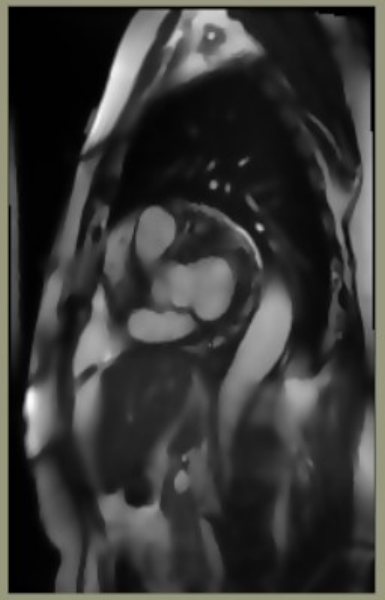
Preprocessing steps



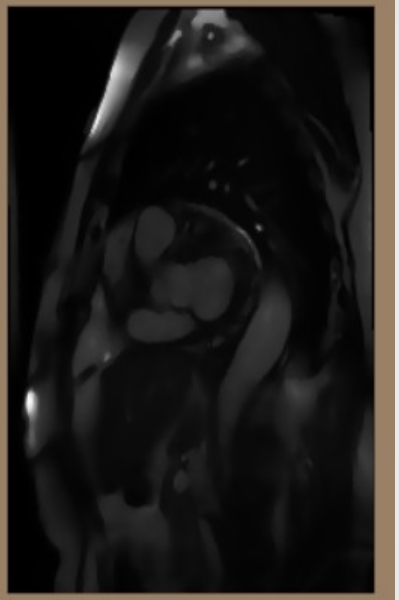
Reference Image for Histogram Intensity standardization



Original Input Image

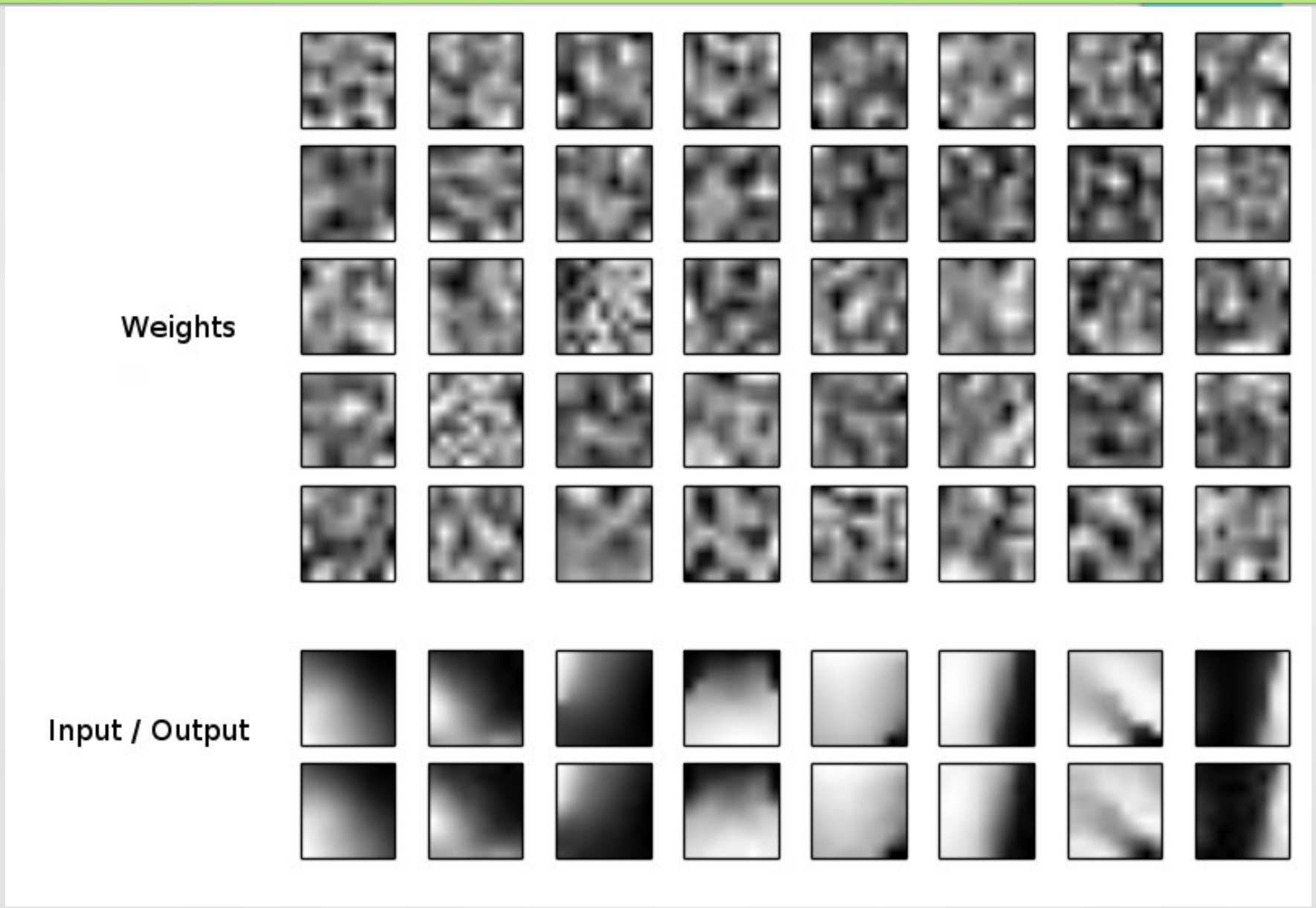


Anisotropic Diffusion Denoising

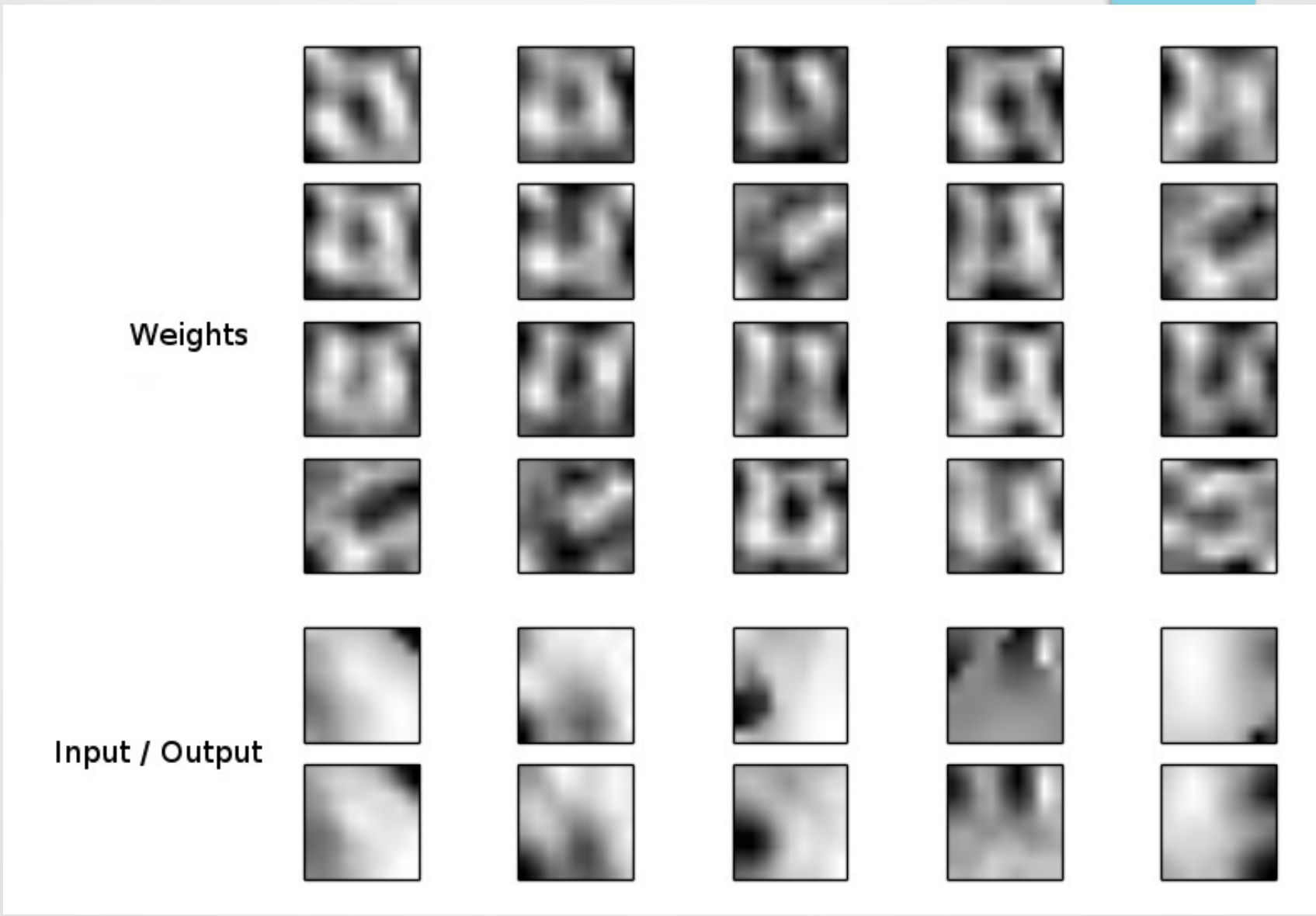


Histogram Intensity standardization

XY Autoencoder



XYDT Autoencoder



Plan for next week

- Visualize Mondrian Forest prediction
- Find bounding box of LV and Heart area
- Experiment with Haar-like features
- Try other features to reduce error