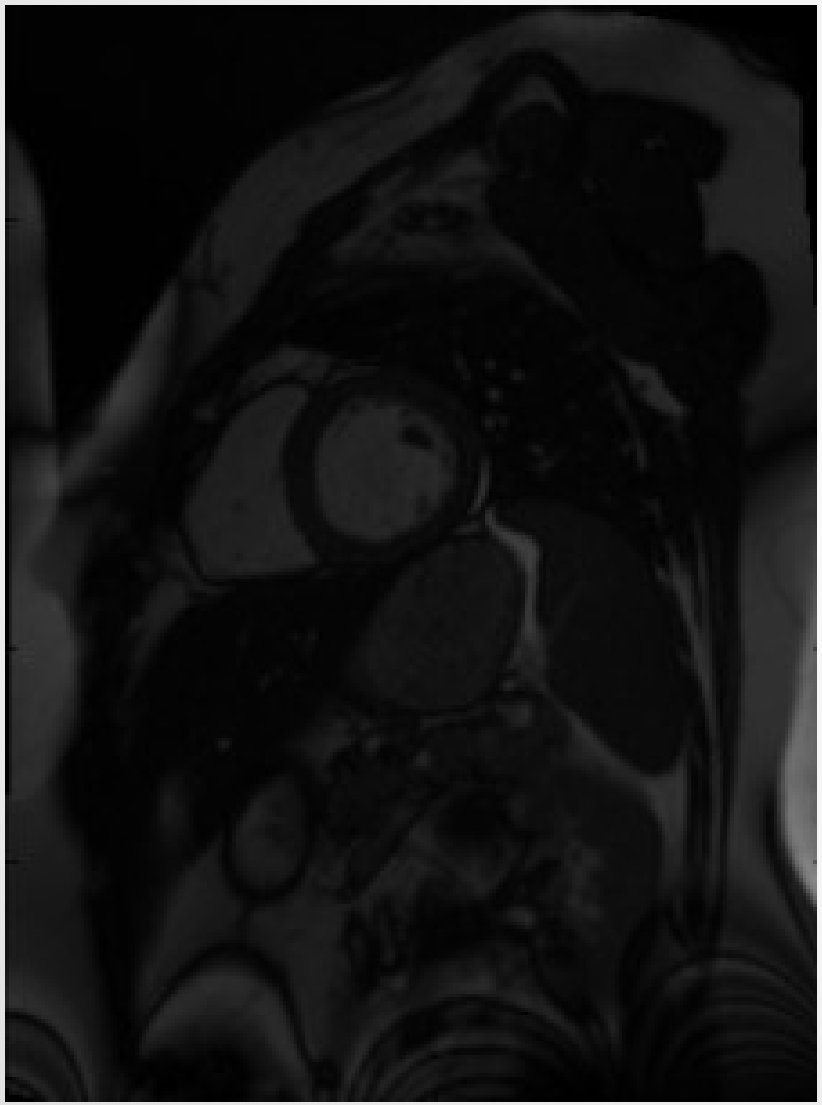
MRI Cardiac Segmentation for the Left Ventricle

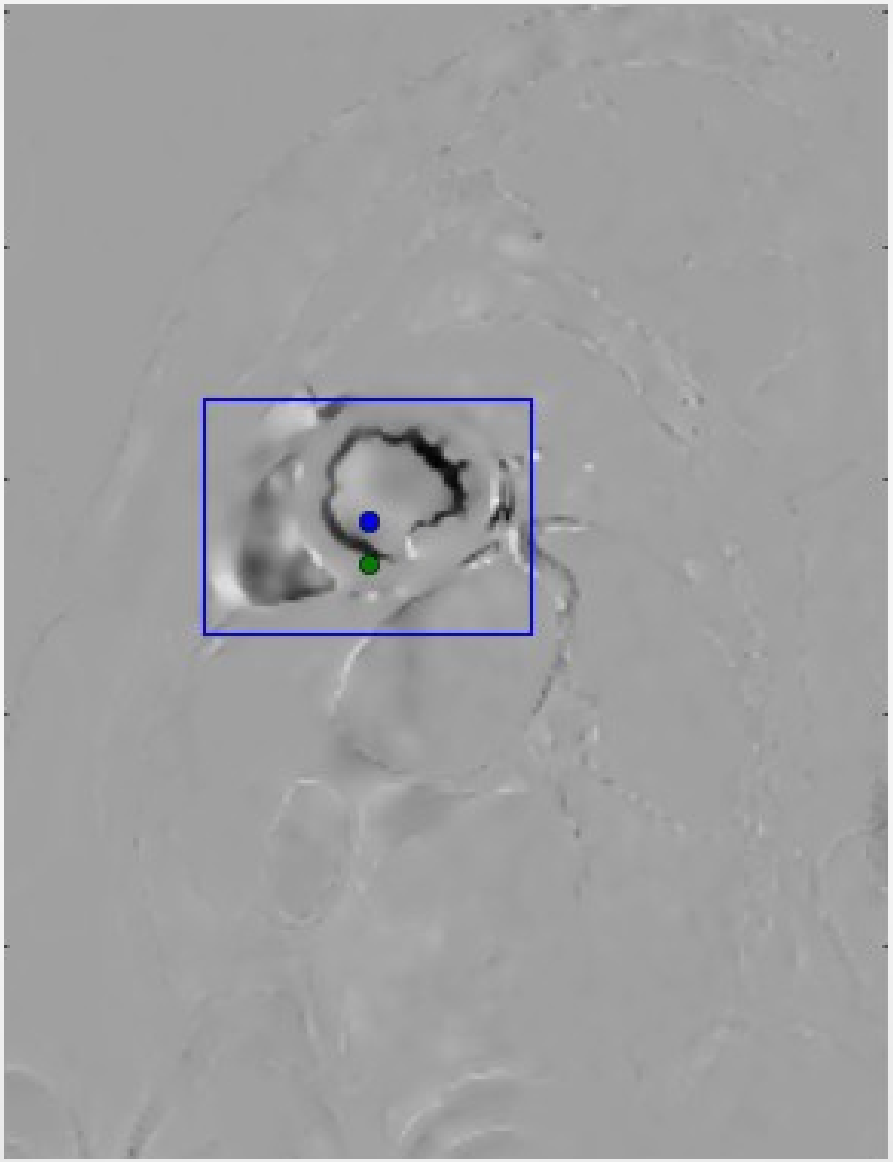


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Week 9

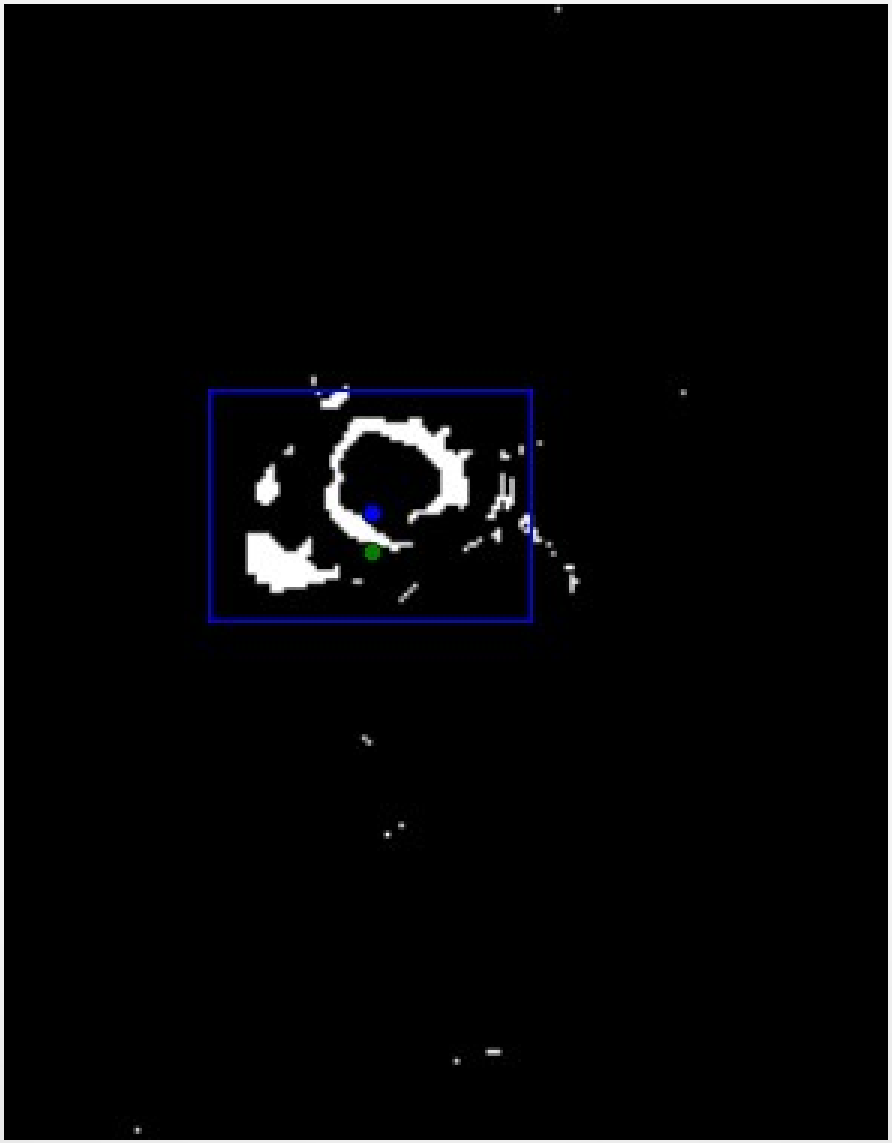
Progress

- Detected Heart with bounding box
  - Calculated time derivative for a patient
  - Used Otsu thresholding on the time derivative
  - Calculated mean pixel to find center of heart

Time Derivative

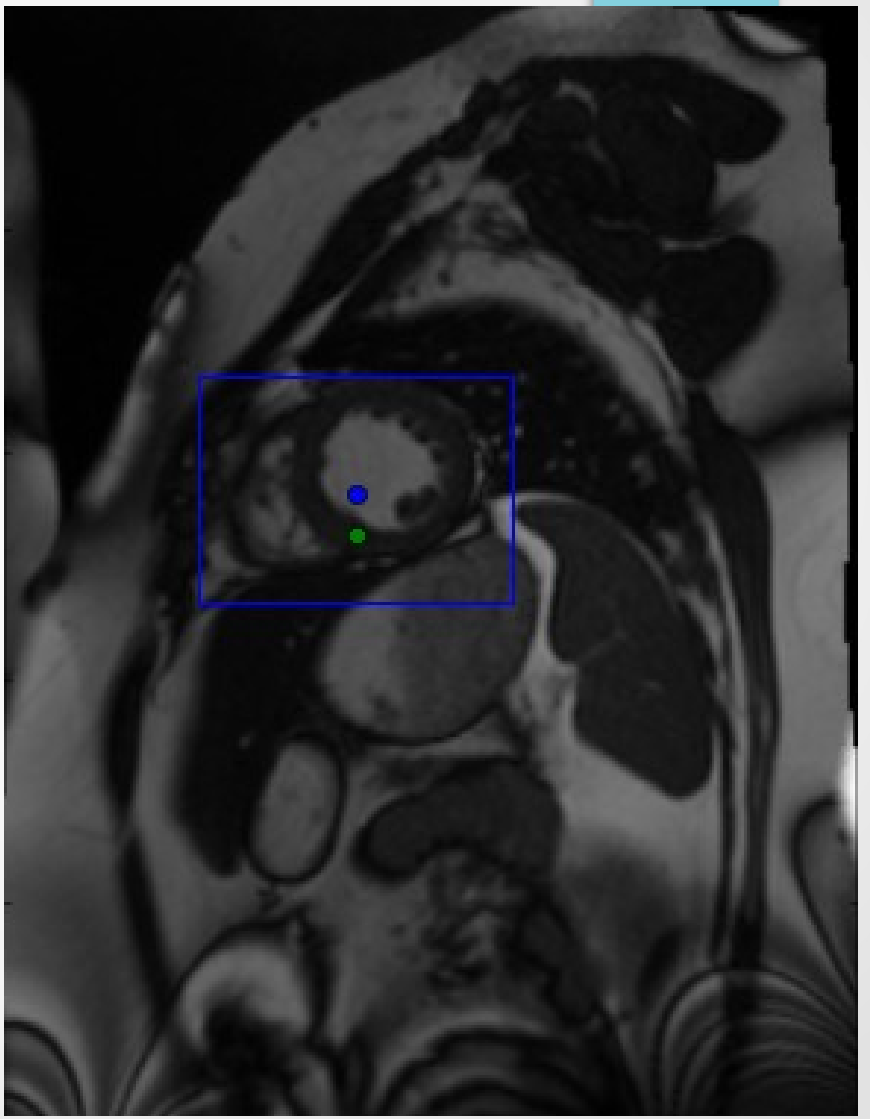


Otsu Thresholding



Heart Detection Results

- Blue dot represents the mean pixel calculated from the threshold image for this time frame
- Green dot represents average blue dot calculated across all time frames



Plan for next week

- Detect Left Ventricle Automatically
  - Use heart bounding box
  - Add results from Random forest to assist in detection