Jack Lin

Nikhil Patel

Josh Olick-Gibson ­

3/28/18

Week 18 Report

On 3/26/18, we had a team meeting to go over what we have accomplished since the past week. Nikhil decided that instead of automating the reading of files from Dr. Lardizabel it was faster to just read them one by one and save the .mat files. Nikhil also wrote a file that was able to process the file in one of the following ways:

1. Compute derivative of heart rate (copied from HRVComputation.m)
2. Compute heart rate (copied from HRVComputation.m)
3. Compute heart rate variability (copied from HRVComputation.m)
4. Generate labels for the samples using the start and stop times from Dr. Lardizabal
5. Remove artifacts from the EKG using the criteria given by Dr. Lardizabal
   1. Heart rate > 200 bpm
   2. Amplitude of EKG signal > 300 mV

Jack was able to randomize the heart rate and time scale in the ECG simulation. However, we realized the code lacked the ability to simulate heart rate variability. Jack will accomplish this task by next week. Josh was able to configure the Arduino data into a readable .mat form for Matlab. On 3/28/18, we had a team meeting where we continued to work on our respective responsibilities.