EE-622 (Biomedical Signal Processing)

Assignment-7

1. Given the ECG signal, find its LP spectrum and interpret the peaks. The sampling frequency of the given ECG signal is 360 Hz.

2. Record your own voiced speech signal for the vowels, "e", "aa", and "o". Record the vowels for a duration greater than 700-800 ms. Find the formant frequencies of the speech signal from LP derived magnitude spectrum. You can use 10th order model to derive LP spectrum.

3. For the given speech signal, evaluate pitch frequency of the speech signal from LP residual signal. You can use 10th order model to derive LP spectrum.