Ebrahim Simmons - simmoe1 - 400200042 Bilal Yusuf - yusufb1 - 400185626

Lab 3 Report

fmMonoBasic.

In-lab: filled in audio buffers, added .raw RF data

Takehome: added our own methods to replace firwin and lfilter, added own single-pass

convolution function

fmMonoBlock

In-lab: we added our impulse generation and block filtering methods that we created previously. program ran faster than the previous file fmMonoBasic.py

Takehome: added our own methods to replace firwin and lfilter, added our own fmDemodArctan state saving was implemented by handling it separately using variables

fmMonoAnim.py

In-lab: we read over the file no changes were required

estimatePSD:

In-Lab: requested changes were made. Computed the DFT and the magnitude of the DFT. Using Built-in functions from fourier.cpp

Takehome: created our own function to estimate PSD using the python code from model subfolder, function was created in fourier.cpp however instead of using FFT we used DFT instead which will cause it to be slower.