

Park McClellan Filter in Class

The file `StormBird11025.wav` is a recording of a storm siren and a chirping bird which has been resampled to 11025 Hz and is limited to about 8 seconds.

- A) Read the file and plot its fft in MATLAB[®]. Determine an appropriate filter to pull out the storm siren. Your filter should be a Parks McClelland type filter.
- B) Design the filter and plot its frequency response to show that it is suitable for this task.
- C) Use the filter function in MATLAB[®] to apply your filter to the wav file and create a new wav file named `StormBirdFiltered.wav`. Play the original wav file and the filtered wav file to verify that your filter works.