## <u>Data</u>: SA1 data is used as a sample from TIMIT/TIMIT/TRAIN/DR1/FETB0

<u>Functions</u>: The main function is customSpectrogram\_modified. This function uses the following as the helper functions:

- processTimitFile reads the timit data and extracts all 4 different types of information
- fftWindowedMatrix calculates the fft of the signal
- plotSpectrogram modified plots the spectrogram
- tiledPlot modified plots all the 3 figures along with the annotations

<u>Example Plot</u>: Attached is an example plot of the phrase "She had your dark suit in greasy wash water all year." Parameters used for this plot are as follows:

```
params.nFFT = 1024;
params.window = [1, 200];
params.nOverlap = 50;
params.fsst = 0;
params.plotType = 1;
[s, f, t] = customSpectrogram_modified(timitFilename, params);
```

