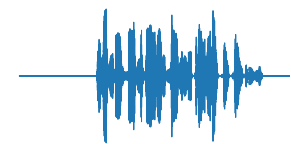


speech utterance



preprocessing



preprocessed utterance



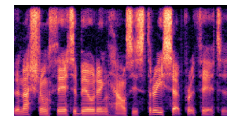
framing and
windowing



Discrete Fourier
Transform



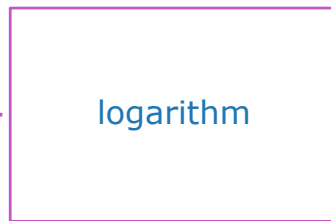
spectrogram



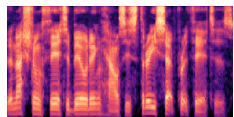
Mel filter bank



logarithm



F-bank



Discrete Cosine
Transform



MFCCs

