FFT Workshop Audio Processing and Indexing 2023

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Using FFT to calculate code for sound signal:

The code for the piano.wav files is: ['U', 'R1', 'R2', 'D', 'D', 'U', 'U'].
The code for the piano_stereo.wav files is: ['U', 'R1', 'R2', 'D', 'D', 'U', 'U'].

I picked 8 bands between 0Hz and 8kHz as it works well for a piano. The frequency bands are chosen to be uniform, but they could be adapted to match the specific characteristics of the instrument better. For example, more bands in lower frequencies might capture the richness of the lower piano notes.