

DSP Lab Demo 10 Exercise 6

Implementation Details

LFO Functions: Implemented four separate LFO generator functions

- `lfo_sine()` : sinusoidal modulation
- `lfo_triangle()` : triangle wave
- `lfo_square()` : square wave alternating between +1 and -1
- `lfo_exponential()` : exponential rise with periodic reset

Observations

Sine Wave LFO

Smooth, natural-sounding vibrato.

Triangle Wave LFO

Linear pitch sweeps create linear pitch changes rather than sinusoidal.

Square Wave LFO

Abrupt, produces sudden pitch jumps between two fixed delays.

Exponential Wave LFO

Asymmetric modulation with non-linear acceleration in pitch change.