pyrubberband Documentation

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A python wrapper for rubberband.

For now, this just provides lightweight wrappers for pitch-shifting and time-stretching.

All processing is done via the command-line through files on disk. In the future, this could be improved by directly wrapping the C library instead.

CHAPTER 1

Example usage

```
>>> import librosa
>>> import pyrubberband as pyrb
>>> y, sr = librosa.load(librosa.util.example_audio_file())
>>> # Play back at double speed
>>> y_stretch = pyrb.time_stretch(y, sr, 2.0)
>>> # Play back two semi-tones higher
>>> y_shift = pyrb.pitch_shift(y, sr, 2)
```

CHAPTER 2

API Reference

2.1 Functions

Command-line wrapper for rubberband

`time_stretch`(y, sr, rate[, rbargs])	Apply a time stretch of *rate* to an audio time series.
`pitch_shift`(y, sr, n_steps[, rbargs])	Apply a pitch shift to an audio time series.

2.1.1 pyrubberband.pyrb.time_stretch

`pyrubberband.pyrb.`**`time_stretch`**(*y*, *sr*, *rate*, *rbargs=None*)

Apply a time stretch of *rate* to an audio time series.

This uses the *tempo* form for rubberband, so the higher the rate, the faster the playback.

Parameters **y** : np.ndarray [shape=(n,) or (2, n)]

Audio time series, either mono or stereo

sr : int > 0

Sampling rate of *y*

rate : float > 0

Desired playback rate.

rbargs

Additional keyword parameters for rubberband

See *rubberband -h* for details.

Returns **y_stretch** : np.ndarray

Time-stretched audio

Raises **ValueError**

if *rate <= 0*

2.1.2 pyrubberband.pyrb.pitch_shift

`pyrubberband.pyrb.`**`pitch_shift`**(*y*, *sr*, *n_steps*, *rbargs=None*)

Apply a pitch shift to an audio time series.

Parameters **y** : np.ndarray [shape=(n,) or (2, n)]

Audio time series, either mono or stereo

sr : int > 0

Sampling rate of *y*

n_steps : float

Shift by *n_steps* semitones.

rbargs

Additional keyword parameters for rubberband

See *rubberband -h* for details.

Returns **y_shift** : np.ndarray

Pitch-shifted audio

CHAPTER 3

Contribute

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- Source Code

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