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Module **audio_handling**

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Functions

def **get_audio_frames**(audio_array: numpy.ndarray, chunk_size: int = 2048)

Performs a stft and splits the audio and obtained spectrum into smaller pieces ready to be played and visualized.

Args:

`audio_array` : Array containing the song's signal.

`chunk_size` : Defines the length of the frames and the parameters of the stft.

Returns:

`tuple` containing the audio and the stft of the audio split in frames.

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def **normalize**(frame: , norm_type: str)

Normalizes a given array with a method specified as a string.

Args:

`frame` : Array to normalize.

`norm_type` : Normalization type to apply.

Returns:

The normalized array.

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def **play_send_audio**(audio_frames: list, stft_audio_frames: list, out_stream: pyaudio.Stream, client: socket.socket)

Plays the generated song frame by frame while simultaneously sending data to the client socket for visualization.

Args:

`audio_frames` Audio to be played split in frames.

`stft_audio_frames` : Stft of the audio to be played split in frames.

`out_stream` : Output stream used to play the song as output audio.

`client` : socket through which to send the visualization data.

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def **to_float32**(array:)

Converts a given array to its `float32` representation.

Args:

`array` : Array to be converted.

Returns:

The converted array.

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