**SOURCE SEPARATION NOTES**

*Information*:

Spleeter [Python page](https://pypi.org/project/spleeter/)

Spleeter [github page](https://github.com/deezer/spleeter/tree/master)

Spleeter [API reference](https://github.com/deezer/spleeter/wiki/4.-API-Reference#separator)

Librosa [documentation](https://librosa.org/doc/latest/index.html)

*Research*:

Spleeter has its [own website](https://spleeter.online/) similar to the idea I had, but its pretty simple and just accepts MP3 files… doesn’t seem like there’s much user tunability. This is Deezer’s [website](https://www.deezer-techservices.com/solutions/spleeter/), which seems like a company made by spleeter developers that sells the spleeter product for source separation.

Is there documentation, specifically spleeter documentation, relating to ways to improve the source separation quality?

What services/products do audio software companies offer?

What are these companies AI tools doing (and not doing)?

1. How can I make the sound quality better?
2. More generally, how can I control different sound aspects?
3. Do any general methods or programs exist that allow you to tune the unmixed output’s sound quality? Developing a way to predictably improve source separation could be novel.

See this Github post about Spleeter’s default [sampling rate](https://github.com/deezer/spleeter/issues/434): I need to learn more about what it means.

*Ideas*:

1. A way to eliminate parts of the frequency spectrum. This will require outputting the spectrogram. Alter the spectrogram by, for example, eliminating small frequency bands, then create a new audio file with the altered spectrogram.

*Goals*:

1. Expand on spleeter’s source separation library by building it into a useful project for analyzing music.
2. Develop a Python package (library): [Instructions on how to](https://packaging.python.org/en/latest/tutorials/packaging-projects/) do this and upload to the Python Package Index (PyPI)
3. ENDPRODUCTS: Python scripts uploaded to a person Github repository

*Code*:

* Spleeter’s [‘\_\_init\_\_.py’ script](https://github.com/deezer/spleeter/blob/master/spleeter/audio/__init__.py) defines the Codec class and it states the audio files it will accept: WAV, MP3, OGG, M4A, WMA, FLAC