**Spec Doc**

Python Libraries

1. librosa (python audio processing library)

Functions used

.load

.beat.beat\_track

.cqt

.cqt\_frequencies

.note\_to\_hz

.frames\_to\_times

.midi\_to\_hz

.hz\_to\_midi

2. pyWavelets (python library for signal processing using wavelets)

Function used.

.waverec

.wavedec

.wavethreshold

3. Numpy (python library used for scientific and mathematic computing)

4. subprocess (Python module that allows you to spawn new processes, connect to their input/output/error pipes, and obtain their return codes)

5. Pathlib (Python library for working with file system paths in a platform-independent way)

6. select (Python module that provides low-level I/O multiplexing primitives)

7. rmtree (function deletes a directory and all its contents, recursively)

8. sys (Python module that provides access to some variables and functions that interact with the Python interpreter)

9. Pyserial (Python library that provides a way to communicate with serial ports in a Python program)

Cpp headerFiles

Servo.h (header file that defines functions and constants for controlling servo motors.)

bits/stdc++.h (Non standard header files that covers all main headers)

Solid Works

MATLAB