

### Requirements:

<b>Python 3</b>
<b>Tensorflow (Vanilla cpu version for Python3)</b>
<b>Numpy</b>
<b>Random</b>
<b>Glob</b>
<b>Pretty-Midi (pip install pretty_midi)</b>

### Github\_Link:

- Clone or Download the data from Midi-Files into the same directory as the .py file which too can be downloaded
- For windows the current code will work as is however with AppleOS/Linux the GetMidi() needs to be changed

### Instructions:

- Run main after ensuring all labeled midis are put into the Midi-Files folder in the same directory as .py file
- To add more files to the Midi-Files folder, you must label it with the one of the following abbreviations followed by an underscore as such:
- hh\_<song\_name>.mid , cl\_<song\_name>.mid, cn\_<song\_name>.mid, ro\_<song\_name>.mid, ed\_<song\_name>.mid, pp\_<song\_name>.mid, mt\_<song\_name>.mid
- Straying from this formatting will throw an exception
- Other: move\_and\_label\_midis.py
  - A function was created to move files ending with '.mid' from the download file to appropriate data file
  - A function was also made to add the appropriate endings to specific songs
  - Instructions to use this code are in the comments.

### Recreating Results:

Run the main as is for the provided data as the settings for our <currently> best RNN have already been hardcoded into the .py file