Portable Spoons

By Christopher Bartlett

General Information

Name: Christopher Bartlett

Project Name: Portable Spoons (Spoons are the best instrument)

License: GPLv3

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Github: https://github.com/christopherbar/portableSpoons.git

How to Run it

All of my files are runnable, with the main two being midi.py (outputs a song in a .mid file) and notes.py (which prints out a bunch of stuff like scales, and note paths for testing)

All you need to do is clone the repo, and then install python and midiutil (a python library). All other dependencies are included in python.

Project Definition

Audience?

In Short: Me, and one of my friends.

In Long: Anyone that would like to mess with music.

Goals

Primary Goal: Create a platform for generating procedural music.

Secondary Goals: Make a way for someone to easily modify the output.

Incorporate Machine Learning

What if you hate my approach?

Magenta: Google’s alternative to Machine Learning and Music Generation

BEWARE: it’s a huge project, if you want to mess with it, you’ll mostly just mess with training it.

SuperCollider: A python tool for creating music IN PYTHON!!!

BEWARE: this is highly manual, unless you want to make tools in it.

What went Well

The project has a ton of functions and definitions for later usage.

- If you really want to know how to chain notes, and make chords, you can.

Writing Midi files is complete (assuming you can write the notes you want)

- Midi creation is really easy to implement, although I might modify it later.

How did I Fail

Neural Networks should have been higher up on the list.

- All of my work in these files has to do with music as letters and octaves.
- Outputting to files is done, but getting material is not even close.

Bring people onto your projects as soon as possible.

What is Next?

I will be working on this for the weeks to come.

- My partner will start on it as well.

The goal is to finish the music generation within a couple months

- The idea is to train a Network on the shapes of frequencies of a song.
- With this, we might be able to make music that lasts forever!