

Lab 01 – MATH 240 – Computational Statistics

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Abstract

In this lab, we used **Essentia** to extract information about the song Allen Town and the previous songs from its contributors who are The Front Bottom, The Manchester Orchestra and All Get Out. Using the data, we compared the information from each band to that from the song to determine whether The Front Bottom or the Manchester Orchestra contributed the most to the song.

Keywords: Loops; Vectors, Libraries; Directories

1 Introduction

The overarching goal for this entire project is to determine whether The Front Bottom or the Manchester Orchestra contributed the most to their joint song Allen Town. There was also one other contributor in this song, All Get Out (they created the first four lines), that we had to consider. In this lab, we used the music analysis program, **Essentia**, to create data about previously made tracks from each of the artists and stored it in a `.json` file (Ooms, 2014). After compiling information about each band, we compared that to the information about Allen Town to reach a conclusion.

1.1 Intro Subsection

2 Methods

2.1 Methods Subsection

When we were initially given the songs, they were each in the form of a `.wav` file. In order to extract the information about them, we needed to insert a command line argument for each song. One of the difficulties was that it would have been inefficient to type each command, so we wrote code to put the proper commands into a batch file where they can be read.

3 Results

3.1 Results Subsection

4 Discussion

Bibliography: Note that when you add citations to your `bib.bib` file *and* you cite them in your document, the bibliography section will automatically populate here.

References

Ooms, J. (2014). The jsonlite package: A practical and consistent mapping between json data and r objects. *arXiv:1403.2805 [stat.CO]*.

5 Appendix

If you have anything extra, you can add it here in the appendix. This can include images or tables that don't work well in the two-page setup, code snippets you might want to share, etc.