

Project Proposal – Music Classification using Voice Records

Project Aim:

Categorizing music data according to their types/ related area/ genres etc. [Rock,Pop ..] In this project will be use audio processing. During the classification of audio records, it uses variety machine learning algorithms. One of the important point of them, their frequency range and process it. If we explore this project, we will add other feature factors. Maybe , it can be music instrument identification, emotion recognition etc.

Motivation (Why did you choose this project?) :

I want to work on audio processing and provide meaningful outputs. Actually, I want to create outputs for emotional recognition but firstly I can start with classification their types.[As beginning work] If I finish early according to due time, I will work on another subject of music features[audio records features]

Dataset (With the revelant details) :

Dataset will take from this site => <http://marsyas.info/downloads/datasets.html>

For predicted label;

Metal – Disco – Classical – Hiphop – Jazz – Country – Pop – Blues – Reggae – Rock

Above the categories will use for classification layer.

Project Steps (What are you planning to do?) :

Firstyl , I will analyze the audio files [Audios]

Then respectively step by step for machine learning process :

1. Dataset – Preparation [Classify | Seperation Music Time]
2. Feature Extraction – Using Mathematical Modelling
3. Apply - Classification Algorithms for creation of model.
4. Model Validation
5. Model Interpretation

References (Who has performed a similar project that you can take as a guide) :

<https://www.kaggle.com/c/music-genre-classification>

<https://qithub.com/topics/music-genre-classification> [in this link, there are variety projects related with music classification]