

Al and Machine Learning

Genre Classification Project



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Agenda

Introduction

How all done?

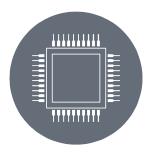
Conclusion

Introduction



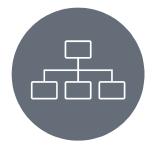
Project IDEA

Music Genre
Classification
Automatically classify
different musical genres.



PROCESSING

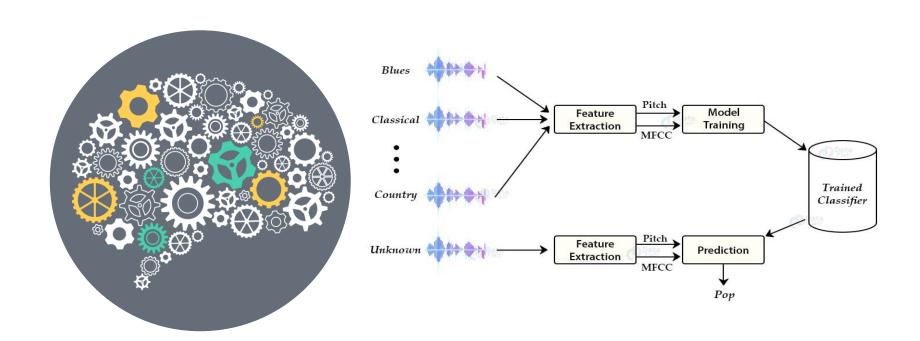
WE USE A DATASET
CONSIST OF 10 GROUP
OF GENRES CLASSES
WITH SIZE ABOUT 1
GEGA BYTE



TESTING

Download new music from outside and test our model.

How all done?



Work process

Download the training dataset Gtzan that consist of 10 different classes of music genres



Split the data into two parts: training and testing.



We download some models (knn – logistic expression) from internet.



Start training our models and save their state for future work, because we don't need to train our models every time. So, we saved them in pickles.



We worked on the frontend part using flask framework in python (we create a simple page that take input music and print the output on it).



Finally, to the testing part.

Testing part

Take unknown music



Model will split it into 10 parts , and remove the parts with no sound



After extracting features from each part like MFCC or pitch. Each part will go through our model and gives us the result. The more classes gained the more genre wins

Conclusion

So, we talk about what its music genre classifier, how it works, and how it classify our music's. Now, lets make a demo!

Thank you!