

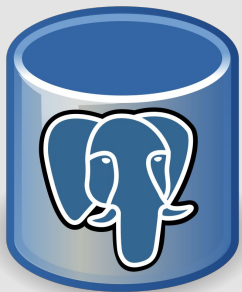
# MUSIC GENRE CLASSIFICATION

Can machine do better?





# TOOLS

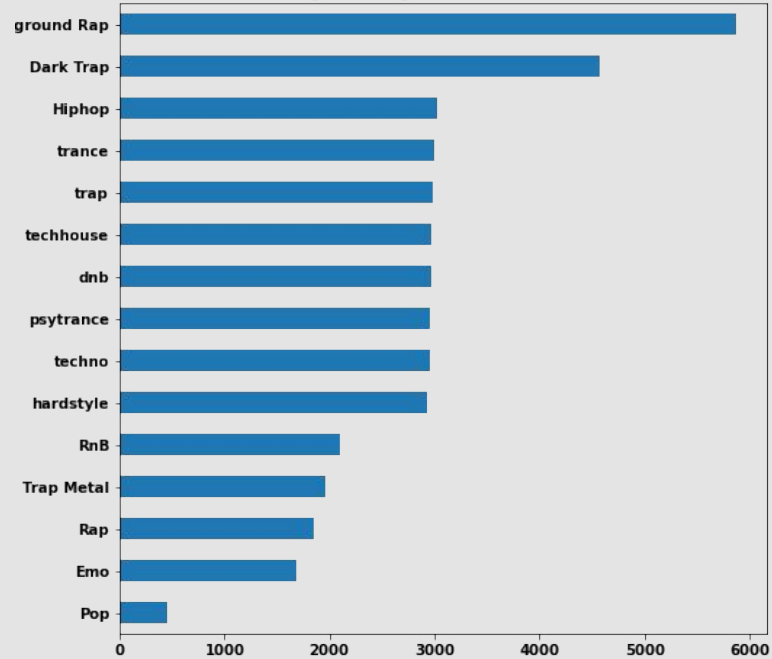


# DATA

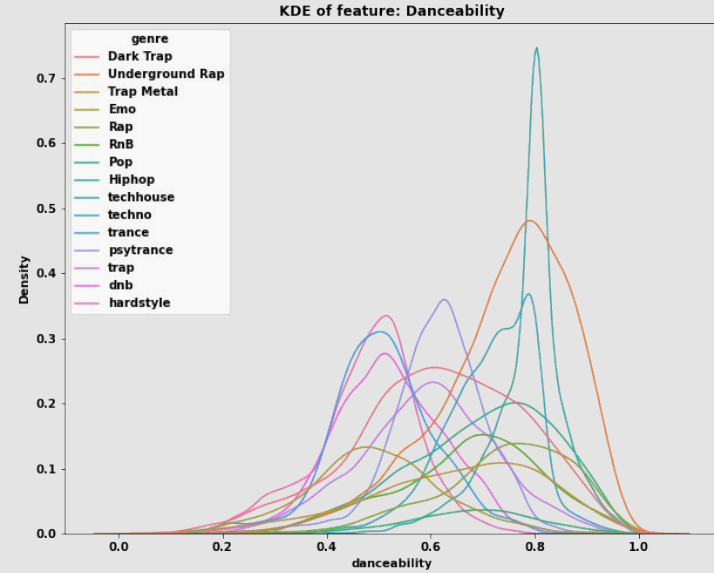
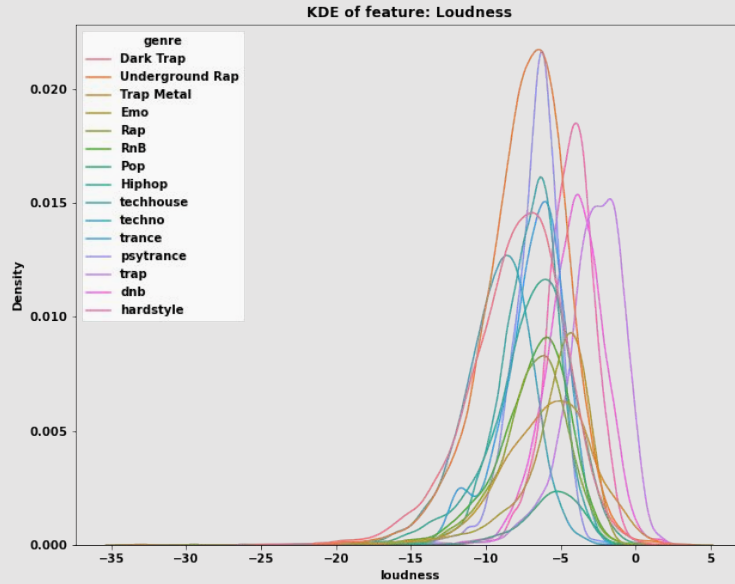
- Features
  - Danceability
  - Energy
  - Liveliness
  - Etc.
- 15 classes
  - Trance
  - Psytrance
  - Rap
  - etc.

# EDA

Frequency of each class



# EDA



# MODEL PERFORMANCE



	KNN	RANDOM FOREST	XGBOOST	MLP
ACC	0.29	0.67	0.69	0.67
F1	0.24	0.61	0.68	0.66

## **FUTURE PLANS**

- Collect more data ( from same class, or different class)
- Classify using actual music data (.mp3, .wav, etc)
- Make an webapp
- Feature engineering
- Different methods of predicting
  - Predict the base genre then predict the sub genre.



# APPENDIX

Feature importance calculated from xgboost

	feat_importance
tempo	0.235620
instrumentalness	0.153189
duration_ms	0.147276
danceability	0.098365
loudness	0.077594
energy	0.058657
speechiness	0.051928
valence	0.049582
acousticness	0.043925
mode	0.029884
liveness	0.023133
time_signature	0.018503
key	0.012345