

UCBOULDER

CSCA 5622 SUPERVISED LEARNING

FINAL PROJECT

QUESTIONS

- What does a Billboard #1 song sound like?
- Can we predict how popular a song will be?

DATA

BILLBOARD CHARTS

- top 100 most popular songs
- updated weekly
- 2010 to 2020

SPOTIFY AUDIO FEATURES

- energy / danceability
- liveness / tempo
- speechiness
- ...

DATA PREPARATION

- weekly -> statistics
- merge datasets

data.ipynb

LEARNING

- exploration
- classification vs regression
- models - RandomForest, SVC, Boosting
- metadata vs. audio features

model_v3.ipynb

CONCLUSION

The higher a song enters the Billboard chart and the longer it stays on, the higher position it will reach.

Audio features do not predict the song placement.

Speaker notes