



Using Spotify  
Song Features to  
see why Frank  
Turner is so  
Entertaining

# Why is Frank Turner's music so enjoyable?

## Questions:

What kinds of features are prominent in his music?

Can his style changes over time be seen in the audio features?

What songs stick out from the rest?

## Steps:

I used Generalized Spotify Analyzer (GSA) to download all of the audio features from a playlist of all of Frank Turner's studio albums from the Spotify API

Next up I removed unnecessary columns and replaced the 'Release Year' column with the album name

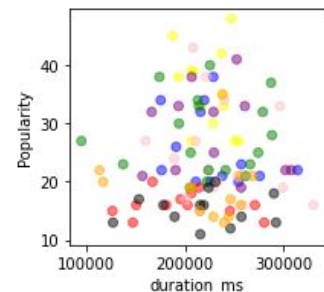
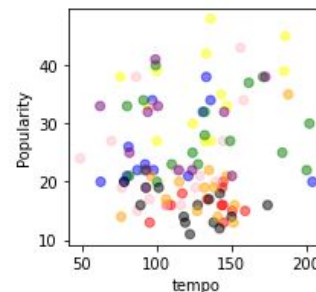
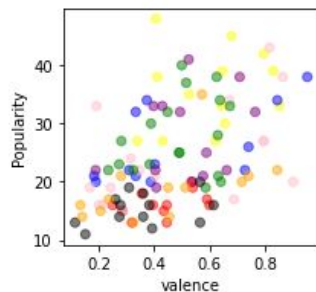
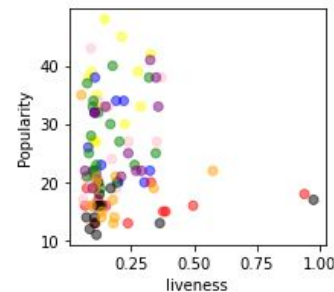
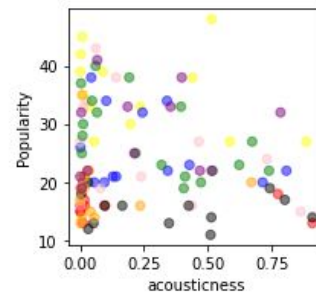
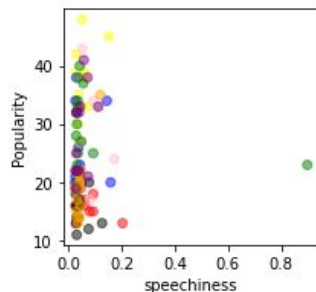
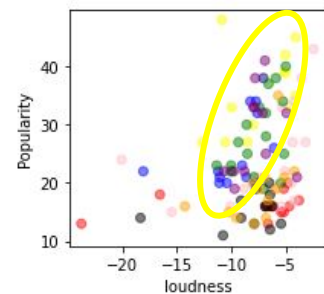
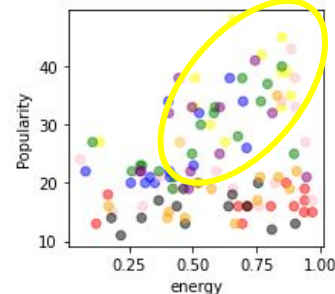
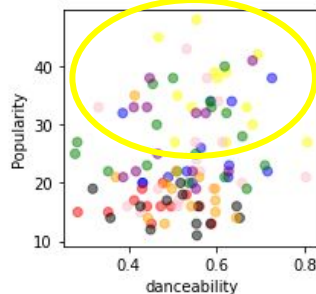
After doing some preliminary looking I chose 4 main features: Popularity, Energy, Valence (positiveness), and Danceability

These were each scatterplotted against the rest of the features and colored by album to look at trends over time

What interesting trends were found!?

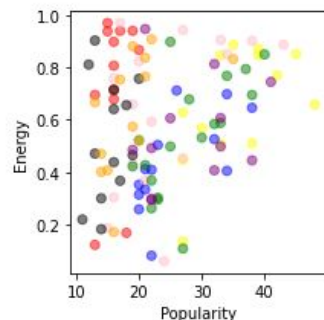
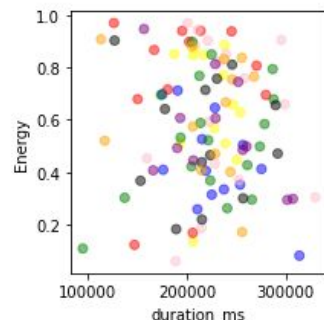
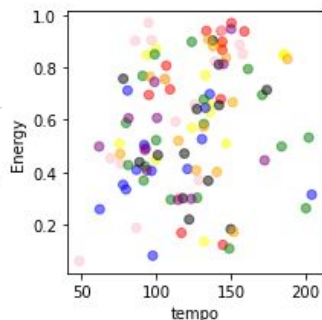
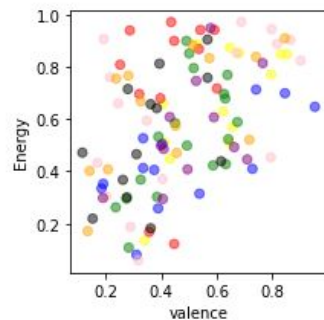
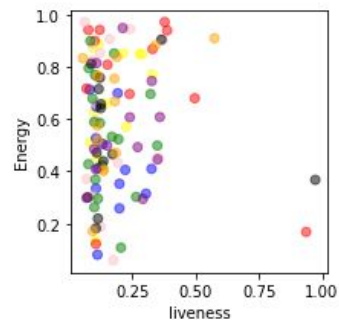
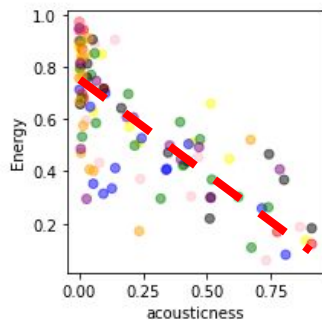
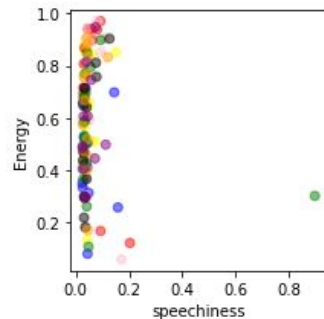
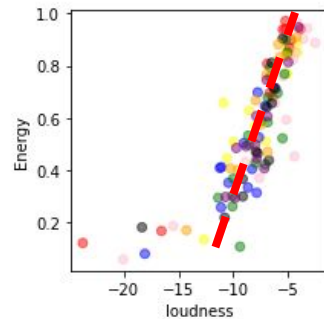
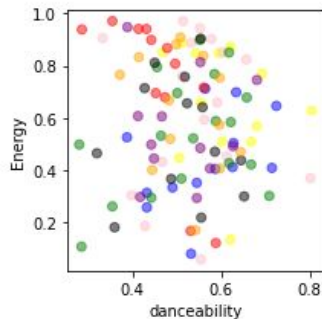
# Song Popularity

- There are a few plots that have outliers that squish the data together, mainly in speechiness and liveness
  - The speechiness outlier is a song called 'English Curse' which isn't spoken but is sung a cappella
  - The two liveness outliers are songs that were recorded live even though these are studio albums
- The popularity doesn't seem to have a strong correlation with any individual feature
- It is interesting to look at the sub trends by album
  - The album 'Be More Kind' (yellow) is an interesting example
  - In general it is more popular overall than the other albums
  - This album appears to correlate against energy and loudness more than the others, the more the better!



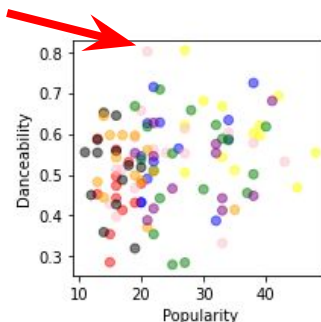
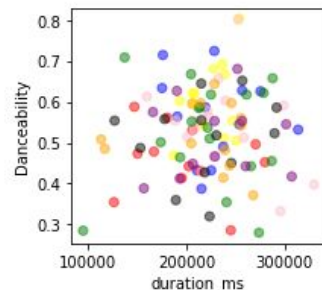
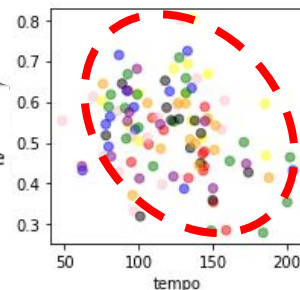
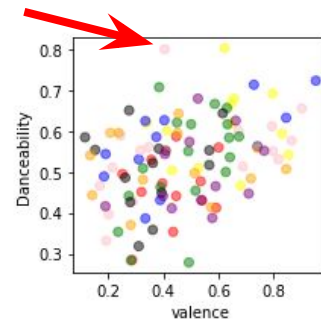
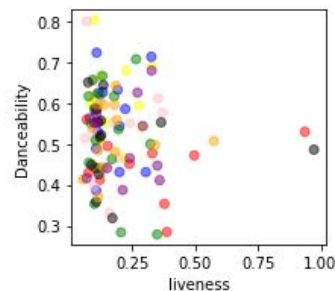
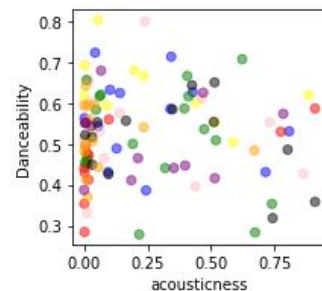
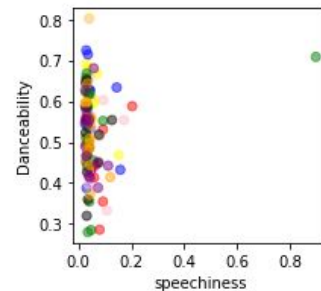
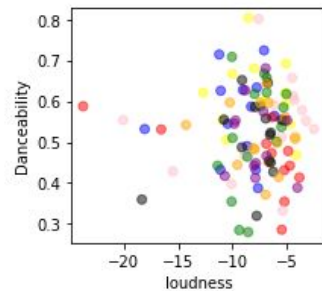
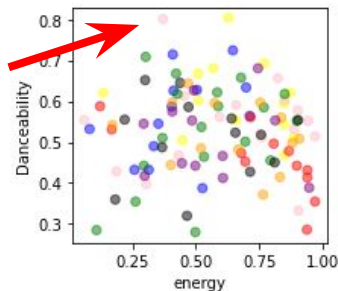
# Song Energy

- The strongest correlation between any of the sets of features is between energy and loudness
- It's a little surprising that there is only a loose positive correlation between energy and tempo, faster doesn't necessarily mean more energy
- It is not surprising at all that there is a strong negative relationship between energy and acousticness, I would expect the same with speechiness if it weren't for the outlier



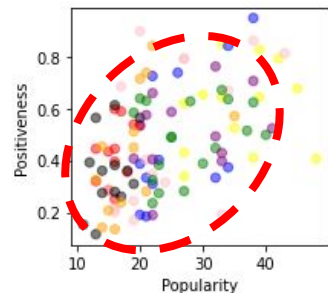
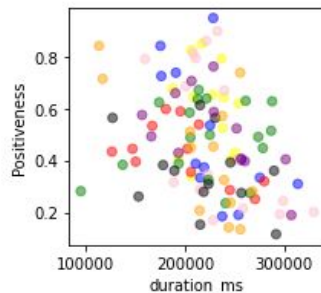
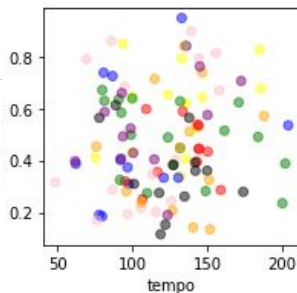
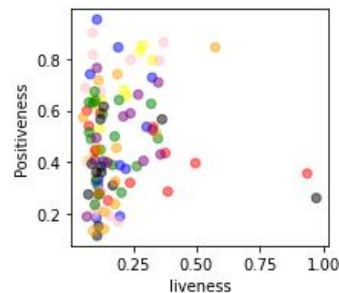
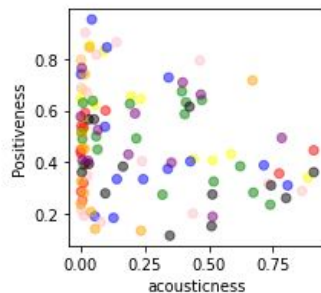
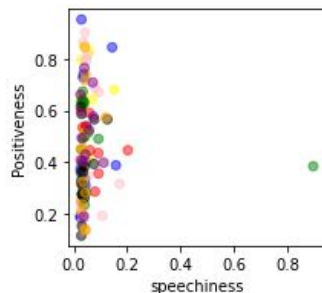
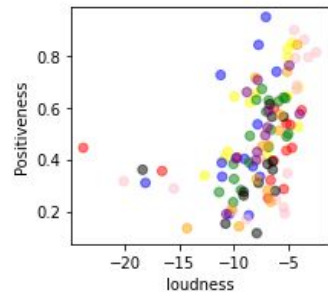
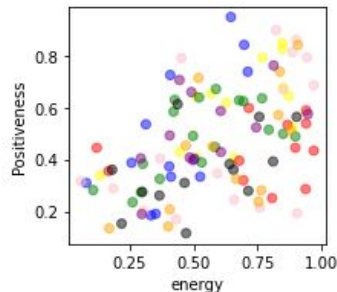
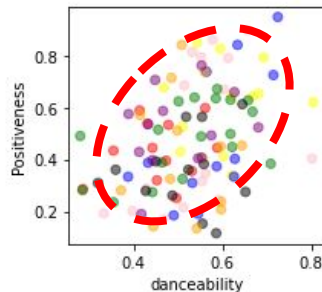
# Danceability

- Danceability is all over the place compared to the other features.
- There is a negative relationship with tempo, the faster songs are less danceable
- Interestingly the song with the most danceable music is 'Common Ground'
  - This song wouldn't have come to mind for me personally but relistening I understand it. It has a steady beat and keeps adding layers of melody
  - Looking at all the plots it is kind of an outlier compared to other features. It's not overly popular and even though it has a very positive message the music has a low valence



# Valence

- According to the Spotify API, valence is a measure describing the musical positiveness conveyed by a track. Tracks with high valence sound more positive (happy, cheerful, euphoric)
- This is a perfect description of a lot of my favorite songs, they are just happy sounding
  - The highest valence song is called 'Sister Rosetta' and is a great example of what a high valence song sounds like
- When looking at individual album trends it is interesting that there isn't just one album that stands above the rest in valence, they are all pretty varied
  - And it's a little funny the album 'Positive Songs for Negative People' is just middle of the pack
- The two most positive correlations to valence are danceability and popularity





# Conclusions

Frank Turner's music tends to be happy sounding and be very danceable and just puts you in a good mood

"But when you're out there floundering

Like a lighthouse I will shine

Be more kind my friends

Try to be more kind"

Frank Turner, 'Be More Kind'

