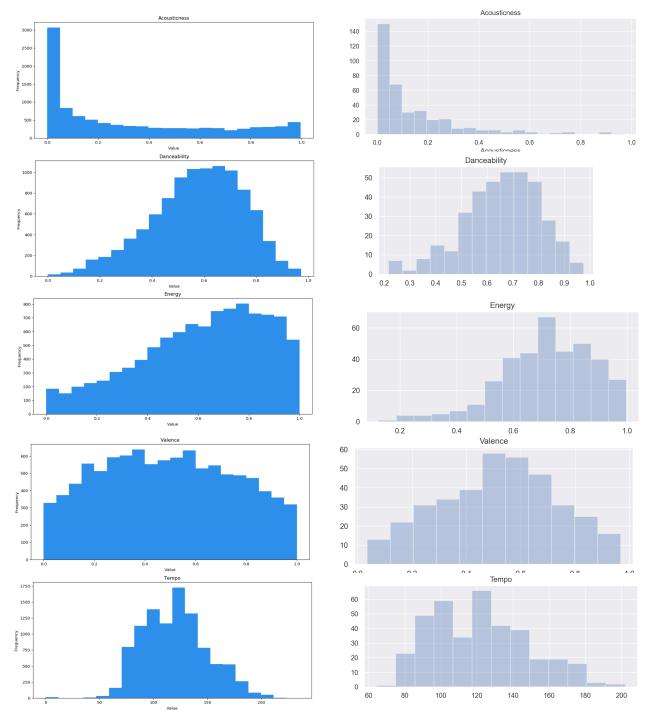
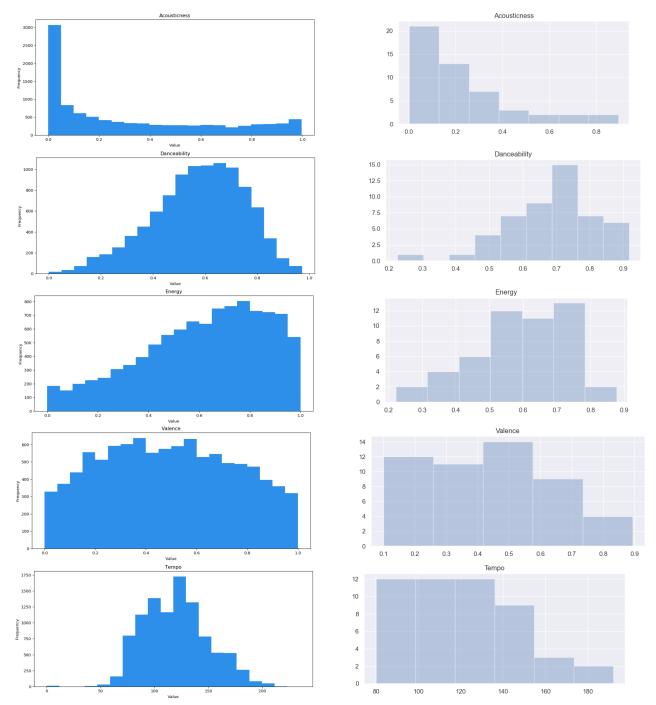
SPOTIFY DATA MY DATA



I feel that I listen to most kinds of music, and these charts prove that. I have omitted four features: speechiness, loudness, liveness, and instrumentalness, since my plots were very similar to the distribution that Spotify provided on: https://developer.spotify.com/ documentation/web-api/reference/tracks/get-audio-features/.

- Interestingly, I have a relatively high distribution of tracks with a high valence, which tend to be positive (happy, cheerful, or euphoric) songs. Maybe I am happy?
- A 120 tempo seems to be my favourite, although most songs on Spotify fall under that category too.
- · Also, most of my tracks appear to be high energy.
- However, given that I have a wide variety of tracks in my liked songs, I will run a sample of tracks I added more recently, since my tastes change with the times.

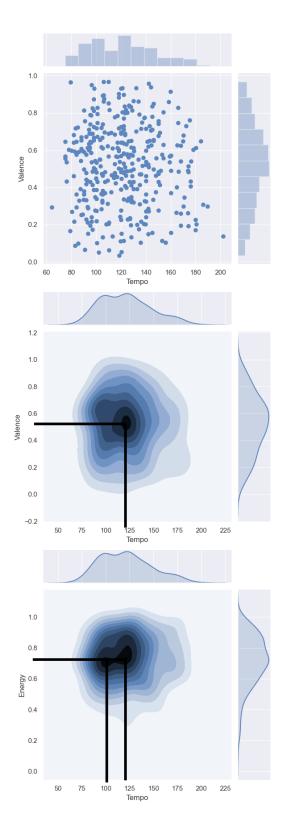
SPOTIFY DATA MY DATA



So, with the 50 most recently added songs, I see three trend changes:

- 1. Energy appears to have decreased slightly, with more songs proportionally in the 0.5-0.6 range than before, where 0.7 was the highest.
- 2. Valence has dropped significantly, where most of the songs went from above 0.5 to below 0.5.
- 3. Tempo has dropped significantly, with most songs under 140 BPM.

SPOTIFY DATA MY DATA



Now, we compare two variables with each other, namely Valence and Tempo, where we see a few clusters:

- Around 80-90 tempo and 0.6 valence.
- Around 125-130 tempo and 0.35 valence.
- Around 120-130 tempo and 0.58 valence.
- Around 120 tempo and 0.7 valence.
- Around 120 tempo and 0.8 valence.
 Clearly, 120-130 tempo makes up most of my favourite songs.

For our kernel density estimation (KDE) (Valence vs. Tempo), we see the darkest area in the region of around:

 125 tempo and 0.5-0.6 valence, with tolerance for songs with a slower tempo and similar valence, and a minor tolerance for high tempo, low valence songs.

For our second KDE (Energy vs. Tempo), we see the darkest area in the region of around:

- 100 tempo and 0.7 Energy.
- 120 tempo and 0.7 Energy.

For our final KDE (Valence vs. Energy), we see the darkest area in the small region of around:

• 0.55 valence and 0.7 energy.

So, we can conclude that my favourite features are:

- 1. 100 or 120 tempo.
- 2. 0.7 energy.
- 3. 0.5-0.6 valence.

We will search for songs on Spotify that match these features to add to my library.

