

Country Music Lyrics Generator

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Country music is thriving during the coronavirus pandemic, their listeners have gone up 11.1% in the year 2020 since mid-March.

- Country music, after 2020, is the top 3 music genre in the US.
- There is a definite style to Country music lyrics that could separates them from other music genre lyrics.
- Beer, trucks, boots, Jesus..... and love.

Favorite Artist?

Luke Combs



Problem Statement

Could a Recurrent Neural Network generate lyrics to our next Country music hit?

We are looking to train a Neural Network that will generate song lyrics based off training on current released country lyrics and predicting a new song that will hopefully become the next number one hit.

- Will there be trends in the data that are worth addressing?
 - Can the RNN predict whole coherent words? If so, would coherent sentences be too much to ask for?
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GENIUS

The Genius API

The Genius website is a site that allows users to provide annotations to song lyrics, news stories, sources, poetry, and documents. The Genius API allows you to have access to the information that is on the site such as lyrics.

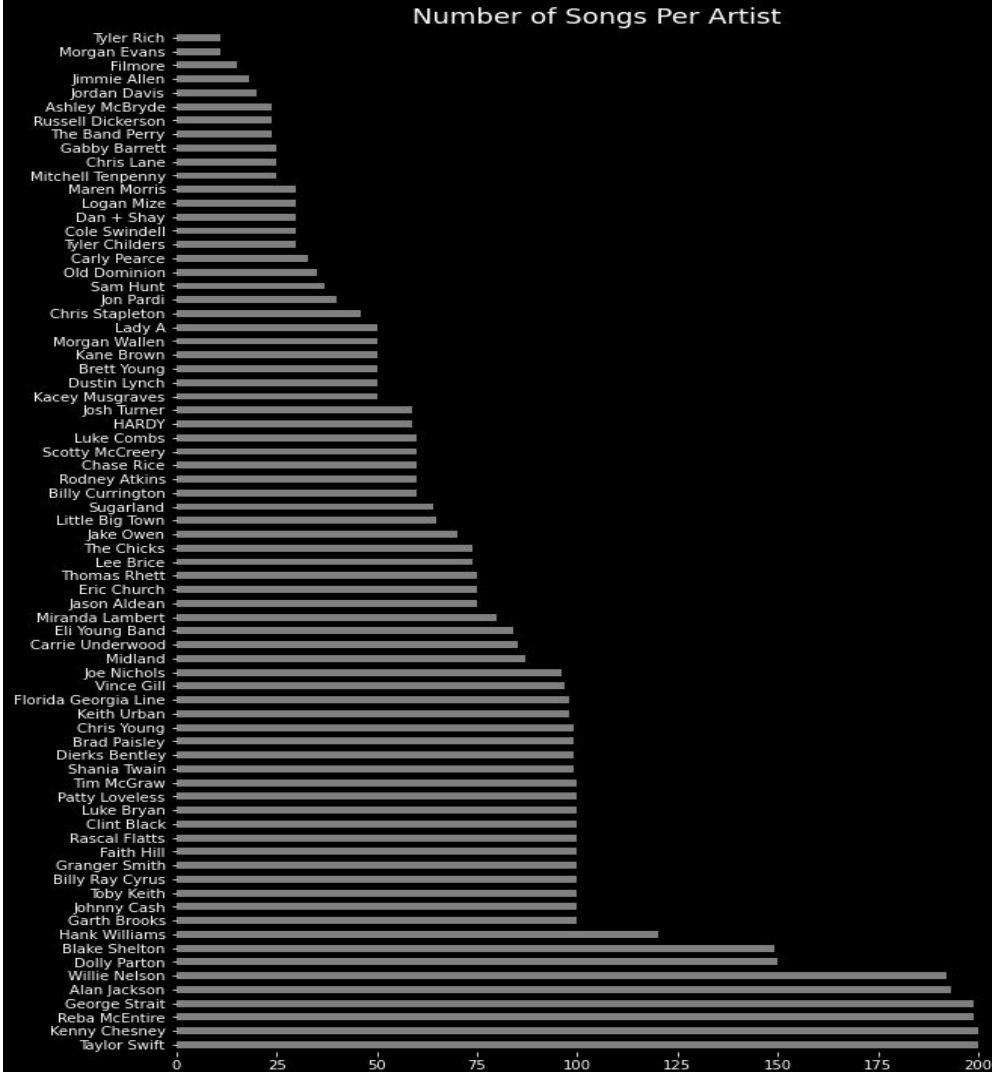
Data Retrieval

- Used the Genius API to scrape for 5,500+ songs.
- Appended them to a single CSV.



The Data

Scraped lyrics from 74 different
Country artists. Why not 75? I
don't know. Scraping more than
5,500 songs.

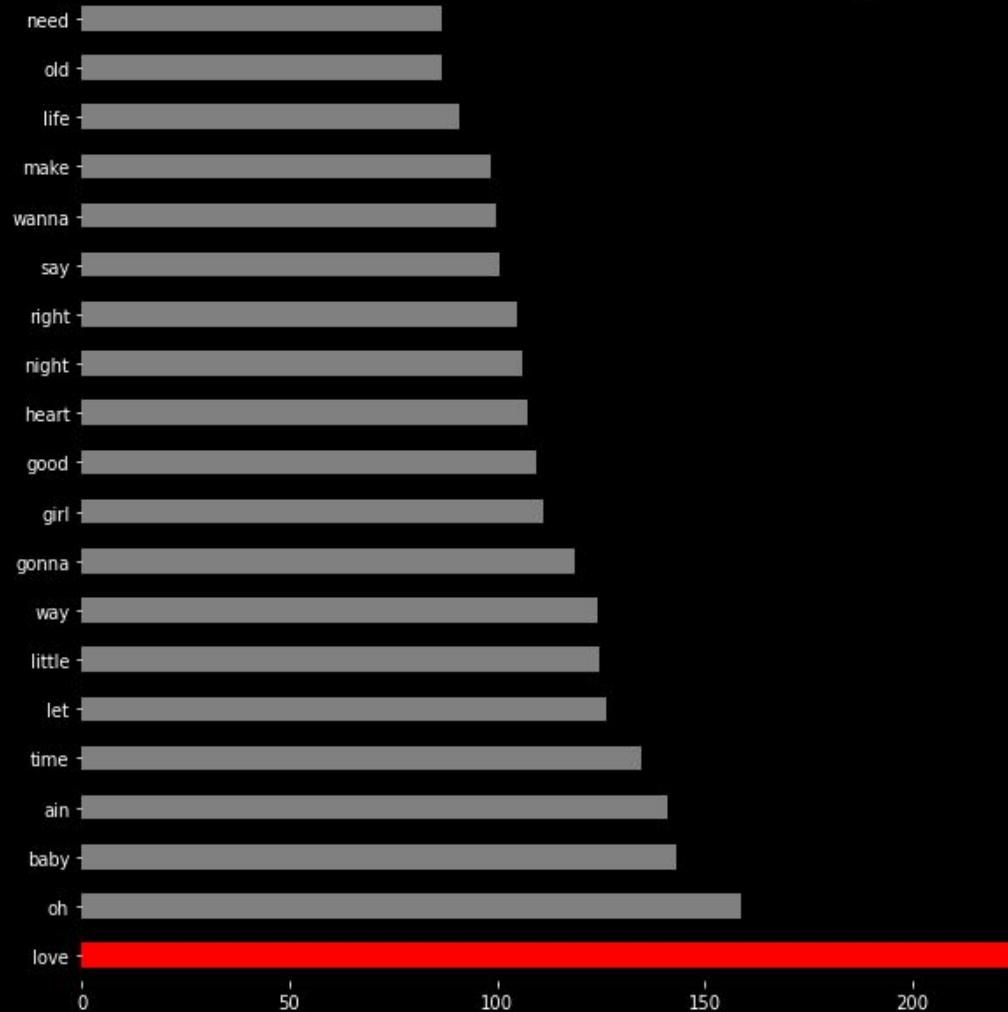


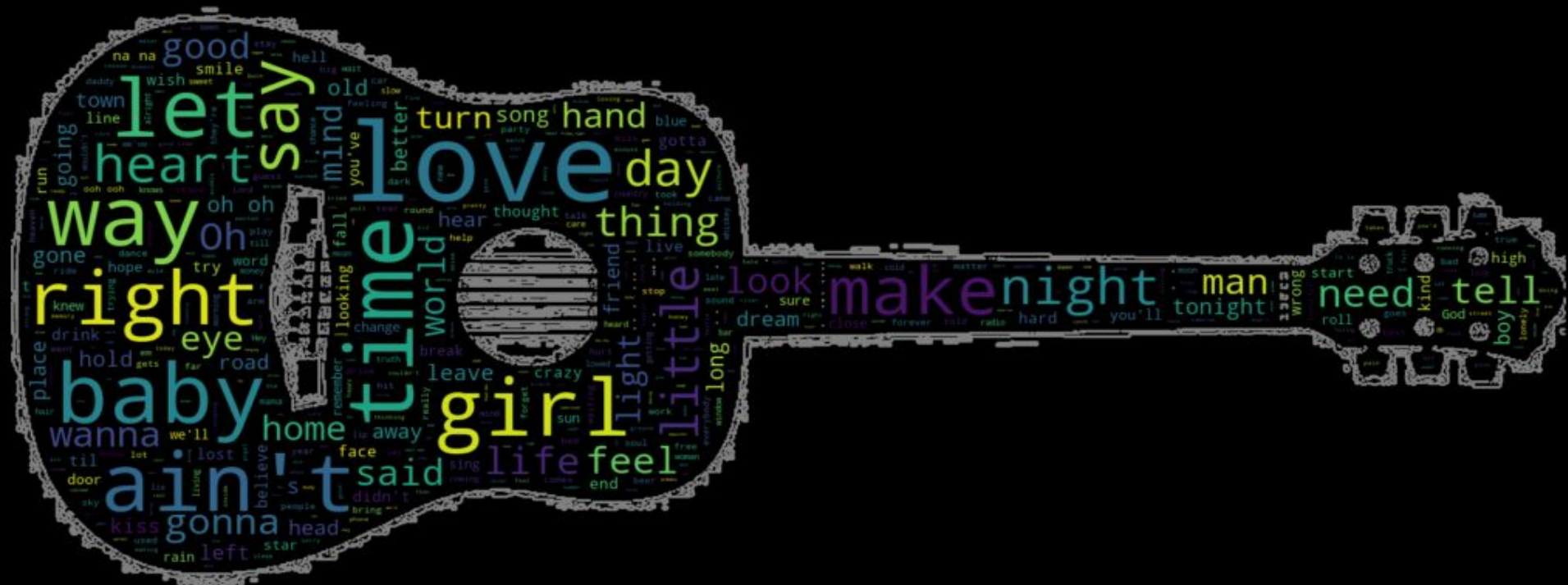
Most used word in Country Music?

You guessed it....

love

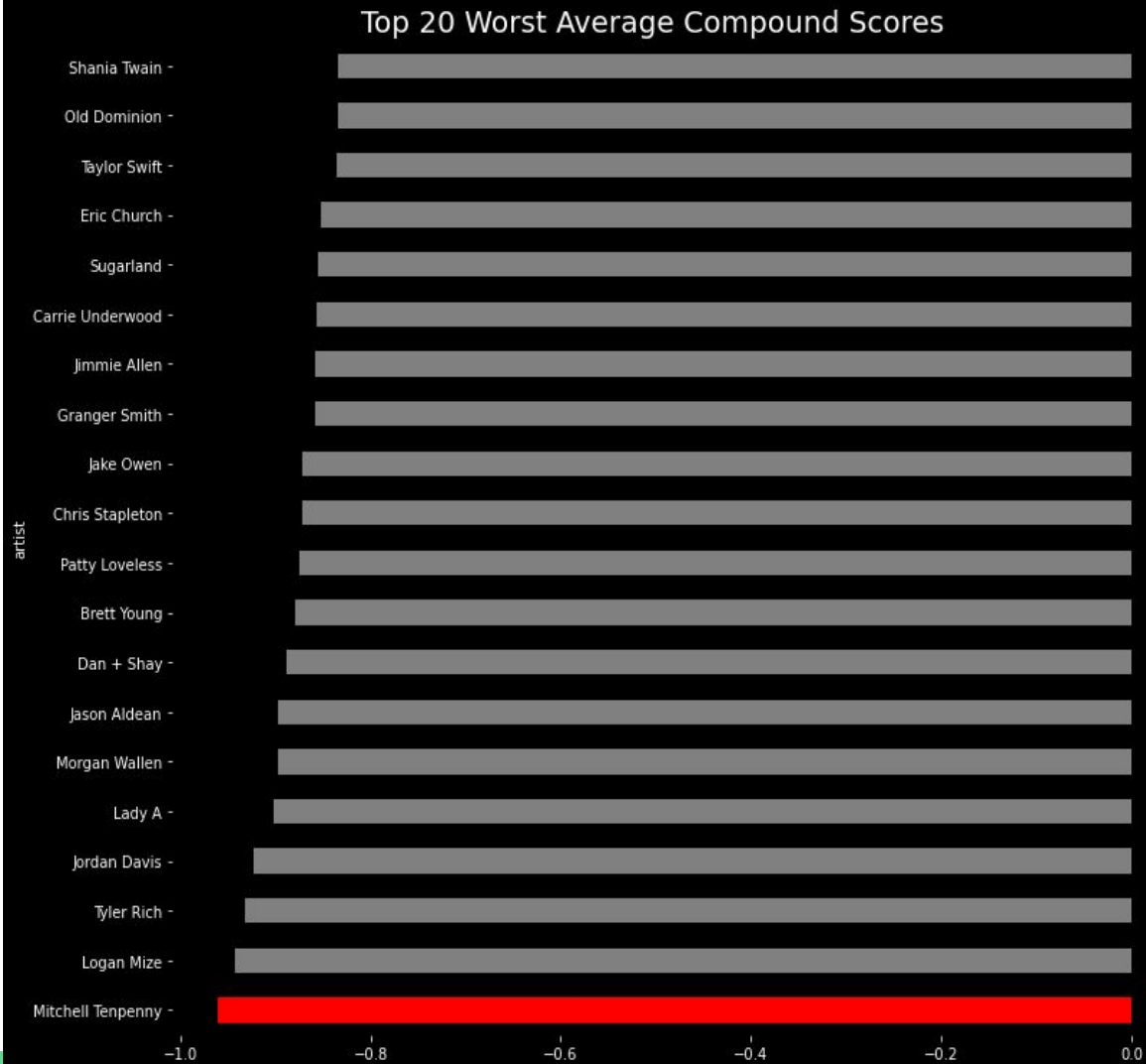
Top 20 Most Used Words in Country



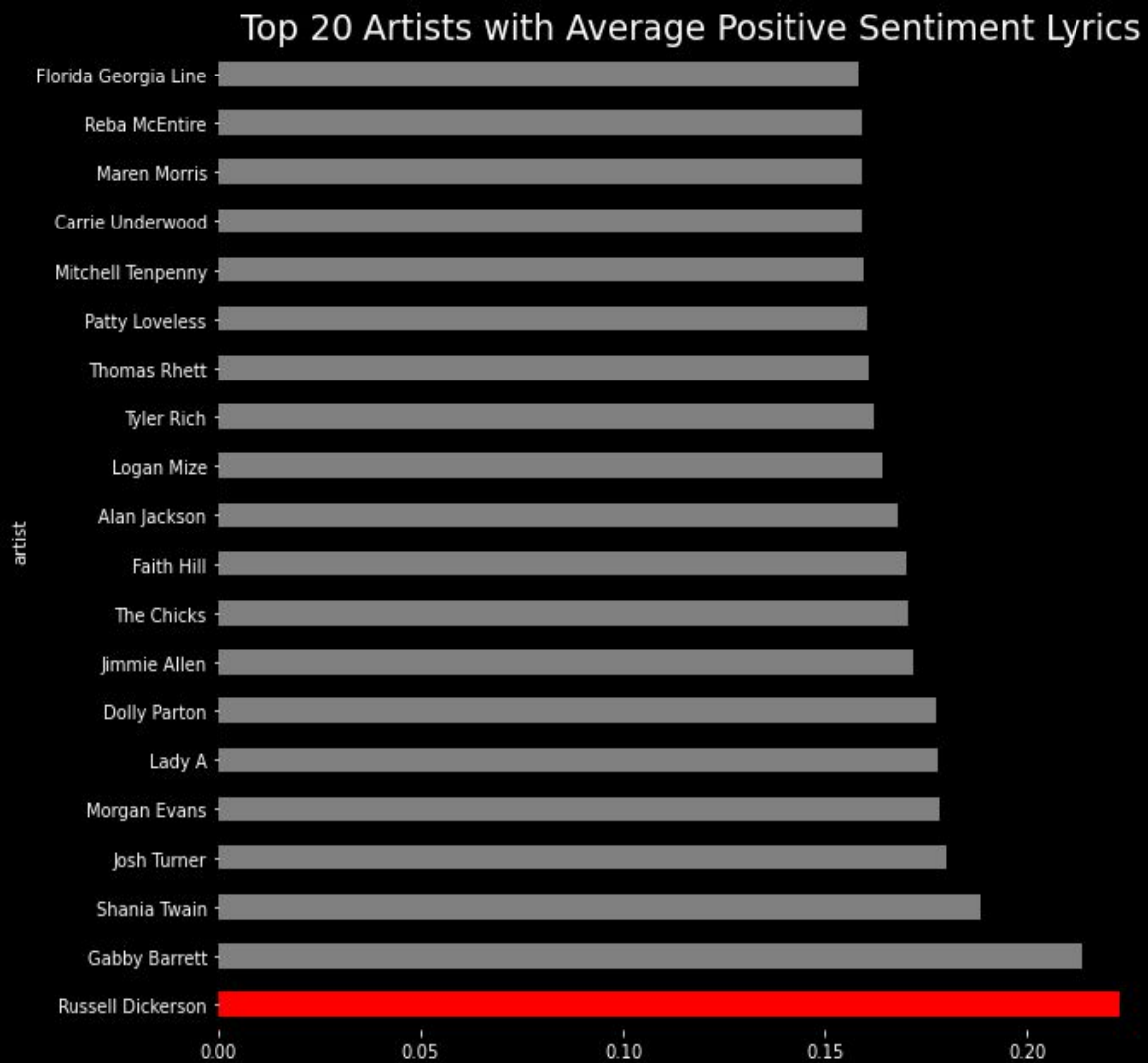


Sentiment Scores

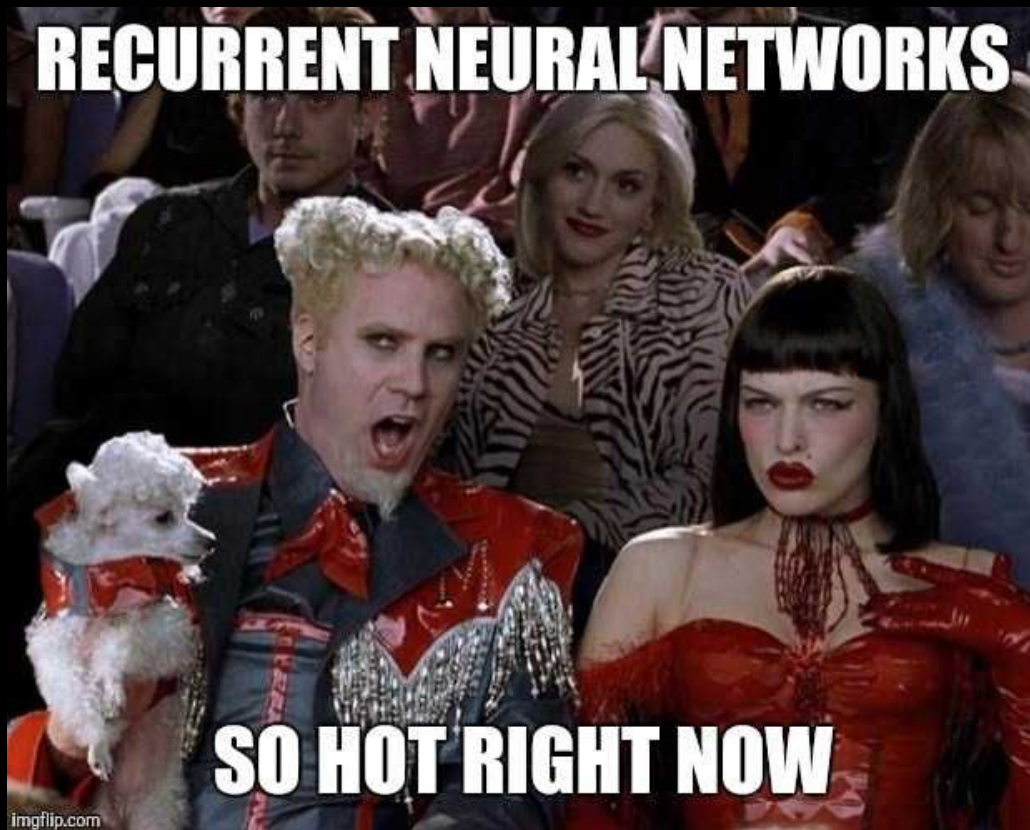
The means for sentiment scores were .0744 for negative and .1443 for positive. The average compound score was .5102.



Russell Dickerson, ftw.



Modeling



Example of target and input:

Text: 'Yo wassup, fam!'

X = ['Yo wassup, fam']

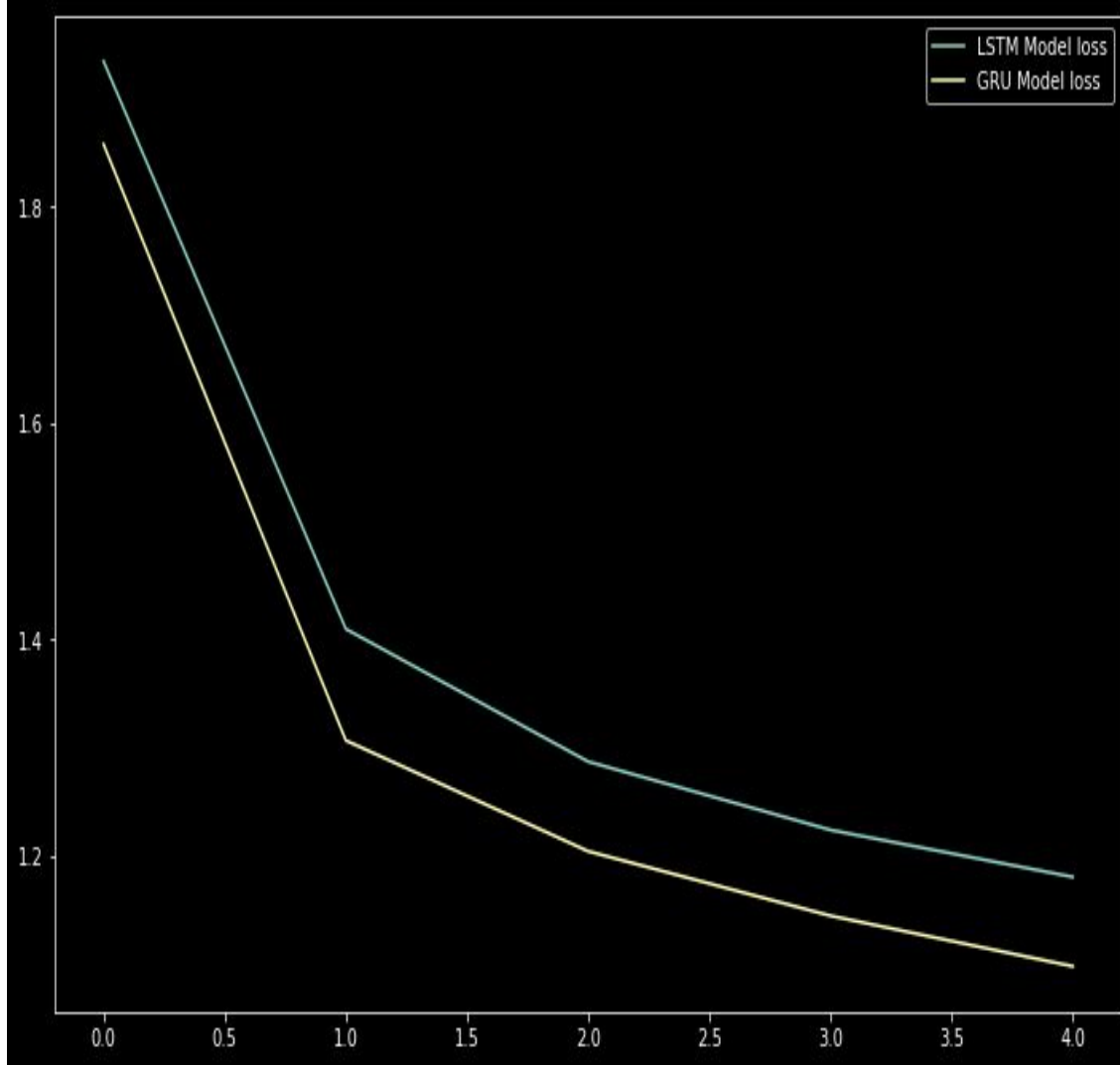
y = ['o wassup, fam!']

Model = LSTM

Model1 = GRU

LSTM vs. GRU

Both models have 3 layers, one Embedding layer, one either LSTM or GRU layer with 1024 nodes and an output Dense layer.



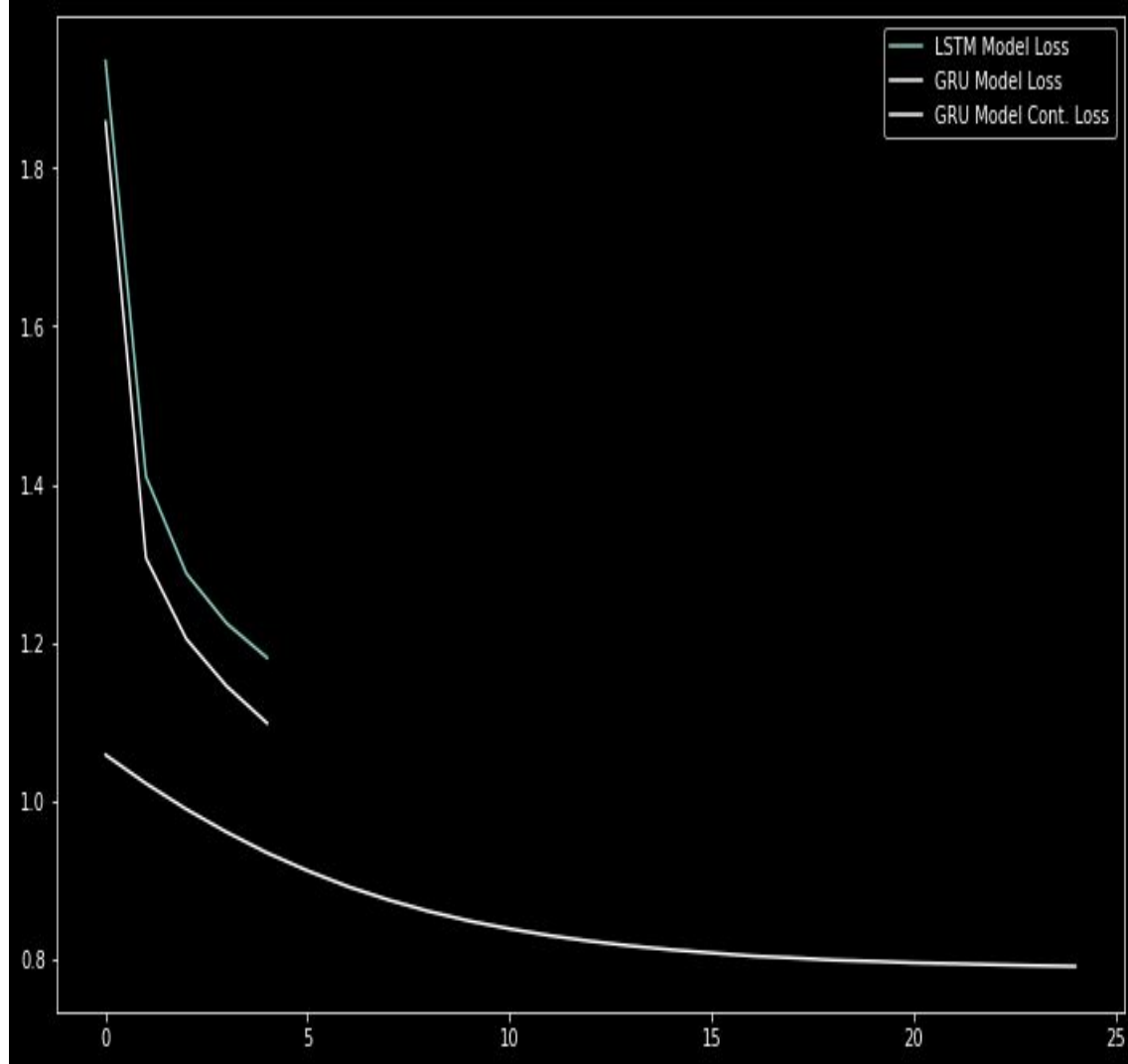
LSTM SEQUENCE MODEL



YU SO POWERFUL



GRU Model Cont.





LOL I'm in love
With a Steady rum down the silence, then listening to me
'Til the whole second guard vices in a deer straight

Beer 33 hurting and my soul
That fellas suit fforts in our powerbacks
I wish I couldn't see
The ones that keeps them silent



Beer tripping, straight along
But you'd never leave me alone
I'll judge eye San Antone
Date my grandpa tax we choose

General Assembly like a diamond windshield
He'd calm me with a melody saying her now I didn't make
The trees of "Hahard gate, have fallen



LOL and Jama, and pumping through the country to one another
But still chasing real life beats where I stand



