



Capstone Ideas



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First idea: Tiktok / Music Recommender focused on new and rising independent artists.

PROBLEM STATEMENT: Among many things, TikTok has become a way to discover new music, with songs often going viral organically through millions of users. With the ongoing Tiktok ban, I am looking at a way to highlight its impact on different industries that this ban could affect and one of the biggest industries is the music industry, especially, for smaller and rising independent artists.

Question: What new and rising artist/song do you recommend based off my current favorite artists?(TBD)

Goal: A Recommender systems that focuses on rising independent artists, create a system that can recommend rising independent artists that through various features.

Audience: Both listeners and artists and potentially Tiktok audience.

Success metrics: Accuracy in modeling and potentially successfully NLP, DBSCAN, K-means clustering data/KNN effectively .

Potential features to consider: Similar artists, mood, lifestyle, etc.

DATA:

- <https://tokchart.com/>
- Tiktok API (limited)
- <https://www.kaggle.com/datasets/asaniczka/top-spotify-songs-in-73-countries-daily-updated>
- Spotify API





Second idea: What should I eat for dinner today?

Goal: Create a recommender system on what to cook for dinner based on the ingredients you already have with a focus on nutritious meals.

PROBLEM STATEMENT: Americans reported cooking an average of five dinners per week; 8% never, 43% sometimes and 49% always cooked dinner at home. Cooking is a crucial part of daily life as well as maintaining health. It is sometimes difficult to know what to make for dinner with a busy schedule and also having to worry about what to consume that will help maintain your health goals.

Question: What should I make for dinner that is both nutritious and with ingredients that I already have?

Audience: People that often cook their meals and looking to make dinner that is both healthy and with ingredients they have as busy people.

Success metrics: Accuracy in classification with specific ingredients that are input as well as finding successful "health-related" features.

Other potential features: By cuisine

DATA:

<https://www.kaggle.com/datasets/thedevastator/budget-friendly-healthy-meals-reddit-s-proven-gu>



Sources

- **<https://www.perplexity.ai/>**
- **<https://www.kaggle.com/datasets/thedevastator/budget-friendly-healthy-meals-reddit-s-proven-gu>**
- **<https://www.kaggle.com/datasets/asaniczka/top-spotify-songs-in-73-countries-daily-updated>**