Capstone Project 1 Ideas

1. Fantasy Football/Sports Betting

- a. Problem:
 - i. Finding value based on historical data when pricing/picking players.
 - ii. Kept this broad, wanted to get your input on best topics to hone in on
- b. Description:
 - i. Determine best indicators for predicting future performances.
 - 1. Past Performances; Professional and College
 - 2. Utilizing Advanced Analytics
 - 3. Injury Analysis
 - 4. Teams/Coaches
 - ii. Identify outliers and attempt to explain why boom/bust occured.
 - iii. Develop correlation charts/graphs to visualize data.
 - iv. Provide value to drafters/commissioners/bettors by reducing risk and increasing chance of winning on a weekly and season long basis.

C.

- d. Data Sources:
 - i. NFL Statistics | Kaggle
 - ii. Detailed NFL Play-by-Play Data 2009-2018 | Kaggle
 - iii. NFL Football Player Stats | Kaggle
 - iv. College Football Statistics | Kaggle
 - v. 2019 NFL Scouting Combine | Kaggle
 - vi. NFL Draft Outcomes | Kaggle

vii.

2. Energy

- a. Problem:
 - i. Is energy being distributed effectively?
- b. Description:
 - i. Energy Generation vs Consumption
 - ii. What are the biggest factors leading to loss of energy?

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- d. Data Sources:
 - i. <u>US Energy Statistics | Kaggle</u>
 - ii. Residential Energy Consumption Survey | Kaggle
 - iii. Hourly Energy Consumption | Kaggle
 - iv. State Energy System Data, 1960-2014 | Kaggle
 - v. <u>High Storage System Data for Energy Optimization | Kaggle</u>

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Music

a. Problem:

i. Is there a correlation between season/time of year and popularity of certain audio factors? b. Description:

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- d. Data Sources:
 - i. Top Spotify Tracks of 2018 | Kaggle
 - ii. Spotify Audio Features | Kaggle

iii.