

Capstone Questions:

- What is your project about? What is the main question you want to answer?

This project is about creating a usable algorithm to determine the quality of a song using its spectrograph. The main question we're trying to answer is if there is a predictable way to find patterns in poor quality songs versus high-quality songs.

- What are the major milestones for your project?

1. Create ML Algorithm

- a. Gather training/testing data
- b. Label data (Mechanical turk?)
- c. Feature Engineering
 - i. Using Colors
 - ii. Dark vs. White
 - iii. Others?
- d. Train the model
- e. Test/Revise algorithms

2. Create Website

- a. HTML/CSS stuff
- b. Database management with user song uploads
- c. Pretty stuff

Data Sources:

- My own music library
- Other people's music libraries

Analysis:

- Mainly error analysis on ML Algo:
 - f1 scores, precision/recall etc.
- Also analysis across which multi-class selection model is best for this task

Responsibilities:

Tom: ML Algorithm/Website stuff

Nathan: Database management, front-end website development, some ML

Obstacles: Data labelling, feature engineering, error analysis, website management, actually doing well

Success = Accuracy of ~80%, and a usable website

This Week:

How to approach project with Mechanical Turk?

- Redundancy
- How to do stuff correctly?

Nathan read this:

https://www.reddit.com/r/xTrill/comments/6fre3q/spek_guide_2017_edition/?utm_source=reddit&utm_medium=usertext&utm_name=xTrill&utm_content=t5_386fy