For the final project I'll be choosing the "AI Areas Option". I'm most interested in knowledge representation, graphs/network science. I'd like to build a graph of artists, albums, genres – probably not necessary to go to the song level – and use the graph to build a recommendation algorithm with options for requests.

My tentative plan is to use the musicbrains API (https://musicbrainz.org/doc/MusicBrainz_API) to fetch a sampling of related artists across a set of genres (as much as will be manageable within my compute resources), perhaps "stratifying" the sampling by genre.

Another potential addition to the feature space would be language, using lyrics, description or articles to classify & relate artists or albums. Exploration of communities within the graph & relation to genre (without using that as an input)

If this doesn't meet the intent, I could use an RNN for next note prediction or I think other people have used CNN to generate music. I'd also like to explore a generative algorithm with chromatically shifted frequencies, using the math of harmonics.