Week 7 Meeting

2357351G - MSci Half Project

What I've done this week

- Read Speaking About Sounds: A Tool for Communication on Sound Features (2017).
- Read and summarised Style Transfer of Audio Effects with Differentiable Signal Processing (2022).
- Did another iteration of using the AudioCommons timbral extractor models to analyse the effect of applying EQs using the terms in the SAFE-DB dataset.
- Did some analysis on the SocialFX dataset, however I have yet to find a way to apply the effects from the dataset to audio in the same way as the SAFE-DB dataset.
- Thought about what inputs/outputs of the model should be and I think raw audio might be the most flexible can still use parameter prediction within the model itself.
- Considered a slight change of direction to the project looking at some of the future work proposed in the Style Transfer paper.

Questions

I'm starting to have doubts about whether natural language is the best way to describe sound characteristics, and whether using reference tracks and style transfer may be more quantifiable. I still believe all the reading I have done into music language will be useful, but maybe more as a counter argument to why it is quite poorly defined. I would be interested to hear feedback on this potential slight change to the aim of the project.

Plan for next week

- Do some more reading into style transfer for (music) audio.
- Try to find papers relating to how reference tracks are used to describe timbre (rather than natural language).

Where I am in schedule

- Getting a better understanding about how useful semantic descriptors are for capturing timbral features.
- Need to spend a bit of time exploring alternatives that may be more natural.