Meeting 2 with Prof Rubin

18 September 2017, 15:00

Prof Rubin

- Email Otis about MATLAB code issues.
- Prelim report feedback tomorrow.

Bianca and Lindzi

- Met with Benji Rosman this morning to discuss machine learning.
    - Need to reduce the scope of the project. It's a 4th year project so we're always going to be ambitious at the outset but we need to narrow it down now.
    - Neural networks are not the best approach to use for this, given the time constraints of the project.
    - Rather consider using other machine learning techniques such as linear regression or perhaps K nearest neighbours.
    - Implementation using MATLAB rather than python because we're more familiar with it than with TensorFlow.
- For next week, we need to discuss what our final project title should be (due 9 October)
    - Example title could be "Towards a synthetically generated voice", in other words we're working to advance the field looking at a certain aspect of it.
- Keep Prof in the loop with regards to what we're doing.
    - Will still use the features discussed in the prelim report but not the neural networks approach.
- Using feature extraction & mapping between the robotic and human voices will allow us to see what the difference is between the two voices.
    - This could be the reduced scope of the project as discussed before.
- Can have a nice future recommendations section in our report.

Peter and Joyce

- Struggling with MATLAB, can we use inbuilt functions? YES.
    - Your project isn't to reinvent the wheel. Obviously you need to show some engineering insight and competence but your job is to solve the topic problem. You do get credit for developing your own algorithms in the project but if you want to use existing stuff and just help move the field forward then that's good, just be sure to reference correctly.
- Might want to chat to Otis about MATLAB for filter banks and code problems etc.
    - Having some mel-filter banks issues, getting matrix dimension errors.
    - Trying to multiply the mel-filter bank with the power spectrum but getting *matrix dimensions don't agree* errors.
- Send Prof a paragraph of what you're trying to do and the code and he'll also email Otis about it.