

Deliverable 3

Final Training Results

- After completing the tutorial for generating music and fixing all bugs related to setting up the environment I have successfully generated a melody of varying notes.
- The most important hyper-parameter in my model was the sequence length for a song. This is because the sequence length dictates how much of the previous melody is necessary to capture the enough information to predict an accurate next note. For this project I was attempting to predict the 101th note given a sequence of 100 notes using an LSTM network. I used the RMSprop loss function.
- As of now although I have been able to generate single instrument melodies, I was unsuccessful in attempting to scale up this network to work with multiple instruments. However there is still time before the final deliverable to finish the project and even if I cannot get it done for then I will still to try to solve this problem in the future. I think I was unsuccessful achieving my goal since I wasted too much time setting up the environment and fixing bugs.
- I would have liked to try and use convolutional neural networks instead of LSTM since convolutional neural networks have been shown to work well with speech translate which is very similar to the problem of generating music.