Name: Jason Zhou
Mentor: Dr. Dongjin Song
Status Report #: 20
Time Spent on Research This Week: 2.5
Cumulative Time Spent on Research: 159.75
Miles Traveled to/from Mentor This Week: 0
Cumulative Miles Traveled to/from Mentor: 0
==========

Monday, February 28th, 2022: (0.5 Hrs)

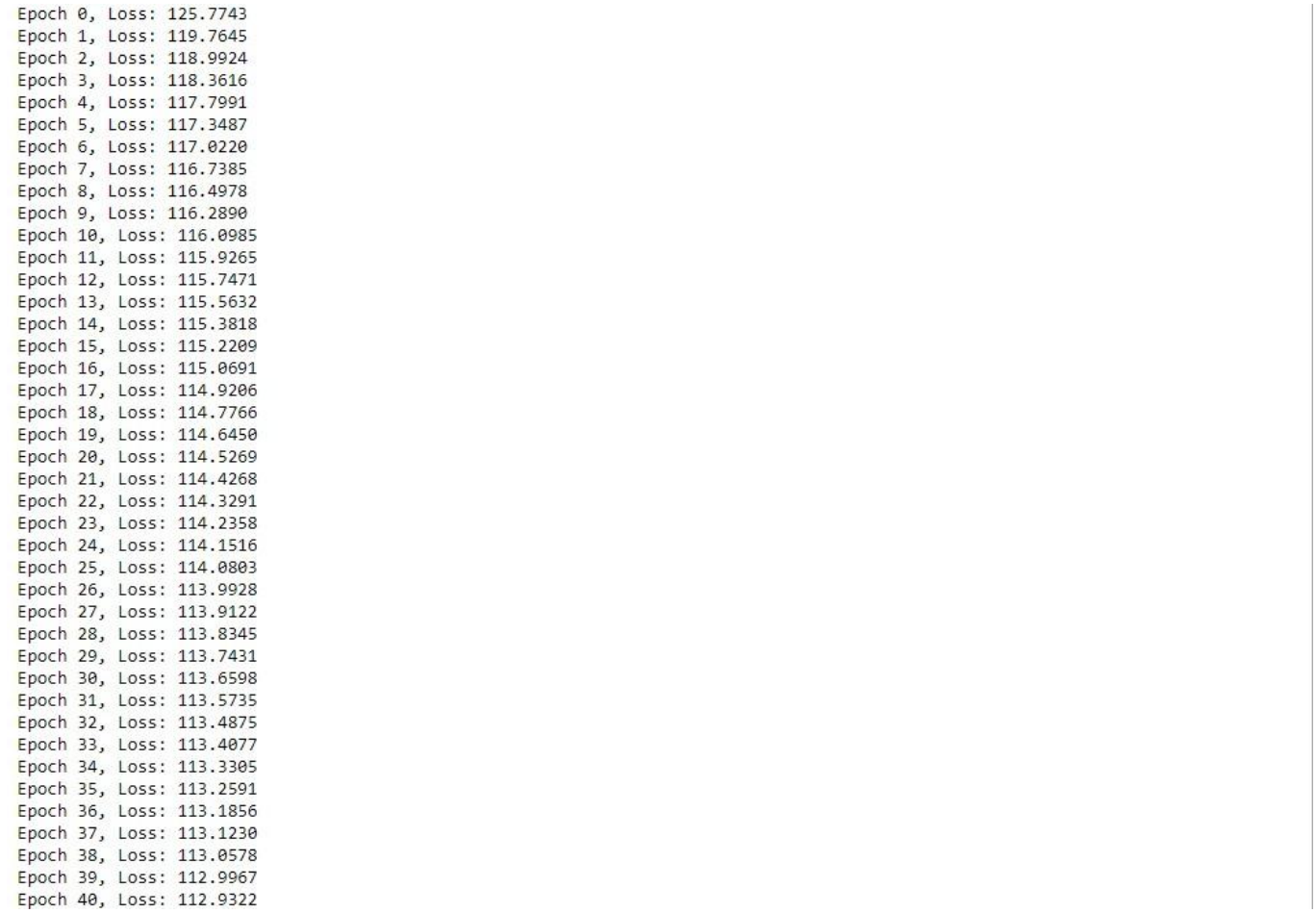
On this day, I had my weekly Zoom meeting with my mentor and told him that I had gotten my convolutional autoencoder (CAE) working. After hearing this, he recommended that I try a method called window sliding. He explained that window sliding is essentially breaking up an image into multiple segments and then feeding each segment into the neural network. For example, if I had 10,000 Mel spectrograms, I would end up with 60,000 segments.

Saturday, February 5th, 2022: (2 Hrs)
(Goes onto second page)

I spent time trying to implement the window sliding that Dr. Song had told me about on Monday. This simply involved me taking each image and splicing the array to split the image into several parts.

After developing the code to do the window sliding and running all of the image segments of audio into my adjusted neural network. However, it went quite poorly because my

loss[1] values came out abnormally high.



(This is an image of the values my neural network returned. Just for context, any value above 100 means something went horribly wrong.)

I made sure to properly adjust the input dimensions of the neural network, so as of right now, I am unsure of the cause of the high loss values. I will have to discuss with my mentor at our upcoming zoom meeting.

[1] Loss is how wrong or inaccurate a neural network is. The higher the loss, the more inaccurate it is.

References

N/A