**Journal Report 6**

**9/29/23 & 10/2/23**

I received my raw dataset and analyzed the different columns of data. I managed to get streams off the NIST servers, but am not sure if this data will be useful in training.

nexus\_logs.copy/magik/24415/temp.txt.201911

# seconds since epoch temperature set point

1.573749923290001869e+09 3.032319946289062500e+02 3.070000000000000000e+02

1.573750043886000395e+09 3.032099914550781250e+02 3.070000000000000000e+02

1.573750164448999166e+09 3.032139892578125000e+02 3.070000000000000000e+02

1.573750405656000137e+09 3.032009887695312500e+02 3.070000000000000000e+02

These are the major problems that I noticed: timestamps seem to be a mix of EST and UTC, there seem to be a lot of broken metadata files, and I don’t go back all the way in time so there may be stretches of time without set points. Also, it’s important to note that there may be duplicate values in nexus\_logs .txt files, which are the files that are generated by the CCR machines I am getting this data from.

I hope to address some of these problems next week and possibly over the long weekend.

**10/4/23**

I was absent on this day. However, I worked on my project during my own time at around 6 PM for 1.5 hours. I was able to troubleshoot my problems from last Friday and get my GAN model trained. I had to create a new Conda environment and downgrade to python version 3.6.1. Then, I installed the library that didn’t work that was mentioned in the previous journal report. I have yet to test this model. It is trained on a dataset downloaded from Yahoo Finance. This dataset has 6 variables - Open, High, Low, Close, Adj Close, and volume. The goal is to utilize GAN to create synthetic stock data. I have yet to compare how my predicted data compares against real data, but am planning to do it this Friday 10/6/23.