**Journal Report 2**

**8/30/23**

Today, I read three research papers in order to prepare for the proposal. I relearned the technical jargon and foundational concepts necessary for the understanding of the anomaly detection project. I completed annotations, but am still looking for more papers to read. My current collection consists of 13 sources. I hope to finish analyzing all of these by Wednesday of next week.

I still have to discuss with Dr. Gabor about which project to choose. I am leaning more towards the anomaly detection project because I have a mentor and I will have direct access to a dataset. Paul Kienzle, my mentor, said that there is plenty more data if it is needed. I am looking at artificially increasing the dataset using a GAN model and different unsupervised machine learning models. I noticed that the current model I implemented can only forecast on a dataset that it has been trained on. I am looking to predict over long periods of time without being bounded by the size of the input sample itself.

**9/6/23**

Today, I discussed with Dr. Gabor on the finalization of my project. I proposed the anomaly detection project as my first choice because of the ease-of-access for the dataset and access to a mentor. He agreed. Some of the notes that we made during the meeting was that this will definitely be a harder project to present for the TJSTAR audience. Based on my experience this past summer, the best avenue to approach this would be to have the background be at least 50% of the project. This wouldn’t be the most optimal in terms of the presentation so I am keeping the project tentative. I will alert Dr. Gabor of any changes to my project.

In addition to meeting with Dr. Gabor, I did more research. I was able to analyze 2 research papers. I have started creating an outline for my project proposal. Two out of three aspects of my proposal will be completed by the end of this week: Introduction and References.