**Wednesday, August 30, 2023**

Today I am learning about transfer learning and model fine-tuning for image classification problems. With the reinforcement learning problem, we want to be as sample-efficient as possible, so it is best to start with as much initial information as possible. Last week I read about the variational autoencoder which creates a latent space of features about an image.

I also started working on the proposal. Over the summer I used LaTeX to write a proposal and report, so I set up a LaTeX environment for my own personal use.

**Wednesday, September 6th, 2023**

I made some progress on my proposal and drafted the Introduction, Objective, and Prior Work sections. The only section remaining for me to do is the Research Plan. I also aim to add some pictures explaining my prior work using CNNs with a small scale car, however, I wasn’t able to find my old data and code.

**Thursday, September 7th, 2023**

I found the files for my previous project. To explain how it works, I found a picture from a dataset I had collected and ran it through a model I had trained with that data, and put both the original image and the output of the first convolutional layer into my proposal so it would be easier to understand the principle behind it.