Software Design Project 4 Report

In this project, I was given the liberty to choose a dataset and train models of my choice on this dataset. I chose a TensorFlow dataset ‘stanford_dogs’ that consists of 20,580 images, split into ~60/40 training/testing data respectively. My goal for this project was to train the 2 Lenet-5 CNN architectures used in the lecture and compare their results to those of another project I found online.

I used the Lenet-5 model and the Alternate Lenet-5 model from the paper provided for the previous project. AriClassifier

The goal with these NN was to classify satellite Images from Texas after Hurricane Harvey as damaged or undamaged. As with every machine learning model, we want the one with the best accuracy when. The more accurately we can determine whether houses are damaged or not with intelligent systems the more efficiently we can get them help and manage damage control.

AriClassifier: https://github.com/aribiswas/stanford-dogs-classifier?tab=readme-ov-file