As far as obtaining target accuracy goes, the 1st part of the project was a good bit harder for me personally. I still feel I'm missing something when finding the ideal setup, as I can't seem to get an accuracy greater than 90%, I was a bit strapped for time, and some of my parameters were pretty sloppy.
Some of the important parameter values were: 3 relu layers of 128, 64, and 32, learning rate was 0.001, 70 epochs, batch size of 64, and a binary classification of 0.55.
Again not the greatest setup, though I was able to achieve a 0.90 accuracy but the f1 score is far off the target at 0.42

Conversely for the 2nd part of the project, I was able to achieve the target accuracy of 90%, with my tuning coming out to 90.48%
Some important parameter values: Dense layer 1 : 64 Dense layer 2: 32, both used a kernel regularizer of 0.006, and the model fit had 35 epochs
I'm happy with the results of this model. Some small adjustments could be made to get it closer to the exact target but I'm at least satisfied with where it's at currently

I think there is clear room for improvement on this project but I was busy and even with the extension I only managed to get it done by the last day of the late policy, so with more time and fine tuning there could be better results.

Update note: I realized as I was going to turn this in that I still had my function that loads in the dataset set up for the gtsrb-small folder and not the larger folder with all of the data, it was only looking at the first 3 folders. So my parameters may not actually transfer well to that.