6600 Intelligent Systems Riley Densley A01227345

I found that the ensemble performed better than the individual networks. On the individuals I saw around a 93% success rate and the ensemble had a 95% success rate. When looking through the results I had one net that only performed at a 57% success rate. I was surprised when I saw this and the ensemble did better than any individual network. All of this was with only 30 epochs.

I was curious to see if changing that one network would have any drastic difference in the results. I changed the network and ran all of the networks through 60 epochs and I got a 1% increase. I thought it was going to be more significant than that but with majority ruling the previous 57% didn't affect the whole as much.

30 epochs	Results
784-30-30-30-30-10, .5, 15	9376/10000
784-30-30-30-10, .4, 15	9339/10000
784-60-60-10, .25, 15	9374/10000
784-20-10, .25, 5	9348/10000
784-120-10, .1, 10	5683/10000
Total	9519/10000

60 epochs	Results
784-30-30-30-30-10, .4, 15	9409/10000
784-30-30-30-10, .3, 20	9361/10000
784-60-60-10, .4, 15	9466/10000
784-20-10, .3, 5	9391/10000
784-120-10, .25, 10	9334/10000
Total	9618/10000