Deep Learning Assignment

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1 Description

I started using the example given in class from the simple CNN lecture. That didn't perform very well, coming in at about 50.39% accuracy, little better than a coinflip, so I moved on to other ideas. I tried several different shallow neural nets, and those performed poorly as well. I then tried freezing an imagenet instance as the bottom half of the net, with trainable weights on top. It got around 70% accuracy. I then landed on a Keras tutorial page that used several different layers, separable convolutional layers, and projecting the residual forward. That network worked really well, and was the final network I used. Code can be found at my Github.

2 Confusion Matrix

732	10
41	727

3 Classification Report

	Presicion	Recall	F1-score	Support
0	0.95	0.99	0.97	742
1	0.99	0.95	0.97	768
Accuracy			0.97	1510
Macro Avg	0.97	0.97	0.97	1510
Weighted Avg	0.97	0.97	0.97	1510

4 Teammate Scores

Teammate	Accuracy
Marshal Taylor	0.9503
Michael Gibson	0.992
Matthew Obray	.9506
Jon Peters	0.92