

Model	Hyper-parameters	Training Accuracy	Test Accuracy
Logistic Regression		76.8	73.6
SVM		76.5	74.5
Random Forest	Number of trees = 10	95.6	70.7
Basic DNN	2 layers - layer1 - 200 nodes, layer2 - 100 nodes	96.7	72.4
Basic DNN	2 layers - layer1 - 500 nodes, layer2 - 300 nodes	96.7	71.2
Basic DNN	5 layers with 50, 30, 20, 10 and 5 nodes respectively	96.7	70.5
Basic DNN	5 layers with 500, 300, 200, 100 and 50 nodes respectively	96.7	72.1
Tuned DNN	2 layers - layer1 - 200 nodes, layer2 - 100 nodes. Adagrd optimizer, Relu activation, learning rate =.001, initial_accumulator = .01, 10K steps	82.7	74.3
Tuned DNN	2 layers - layer1 - 200 nodes, layer2 - 100 nodes. Adagrd optimizer, Relu activation, learning rate =.005, initial_accumulator = .01, 10K steps	96.5	72.7
Tuned DNN	2 layers with 200 and 100 nodes. Adagrad optimizer, Relu activation, learning rate =.001, initial_accumulator = .001, 10K steps	91.4	75.5
Tuned DNN	2 layers with 200 and 100 nodes. Adagrad optimizer, Relu activation, learning rate =.001, initial_accumulator = .001, 40K steps	96.5	72.9
Tuned DNN	2 layers with 200 and 100 nodes. Adagrad optimizer, tanh activation, learning rate =.001, initial_accumulator = .001, 10K steps	77.6	74.4
Tuned DNN	2 layers with 200 and 100 nodes. Adagrad optimizer, softplus activation, learning rate =.001, initial_accumulator = .001, 10K steps	76.8	74.1
Tuned DNN	2 layers with 200 and 100 nodes. Adam optimizer, Relu activation, learning rate =.001, beta1=.9, beta2=.999, epsilon=.1, 10K steps	93.1	75.4
Tuned DNN	2 layers with 200 and 100 nodes. Adam optimizer, Relu activation, learning rate =.001, beta1=.9, beta2=.999, epsilon=.01, 10K steps	96.7	71
Tuned DNN	2 layers with 200 and 100 nodes. Adam optimizer, Relu activation, learning rate =.001, beta1=.9, beta2=.999, epsilon=.75, 10K steps	76.5	74.8