**CSCE 479/879**

**Notebook 2 Question solution**

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Q. What happens when we changed the layers ?

Adding a layer : I added 2 more dense layers of 50 and 100 and increased the training epochs to 10 times. The resulting accuracy increased to 95%.

Q. What happens when we changed the number of neurons in the layer ?

After adding another layer with 50 neurons and and reducing the first to a 100 neurons and after 2 training epochs my accuracy greatly decreased.It is significantly that the first layer has a lot of control on what the total training accuracy is.

Q. What happens when we used a different optimizer ?

Ans. I have tried different optimizers such as Adamax, Ftrl, SGD, and all pulled down the model accuracy to 1.8 – 2.0 which is really low in comparison to using Adam as an optimizer.

Also, I used RMSprop with the regular training data and my accuracy increased to 89% more than what we got for using ADAM.