Group Assignment Deep Learning.

Names:

Excel Spreadsheet (Colab-Filter – Use the Bias sheet)

1. The goal here is to minimize the loss. What is the loss?
2. Use solver to minimize the loss function. What rows/columns are changed?
3. Find the bias (input x weight add bias activate). What rows/columns represent the bias?

Excel Spreadsheet (Conv. Example )

1. Describe the effect of the pooling layer?
2. What is the impact of dropout on the image?

Excel Spreadsheet (Layers)

1. What is the formula for the activation functions in excel? What type of activation function is this. What is the purpose of the activation function?

Jupyter Notebooks – Try running on lab.analyticsdojo.com.

1. Run through the MNIST Dataset example in Tenorflow and Pytorch. What accuracy do you get for each?
2. Try to figure out what the differences are in the architecture of the two models. Describe them here.
3. Try adjusting the structure of the Pytorch model to improve efficiency. Indicate what you did and what the result was.