

**Introduction to Machine Learning Assignment**

**Problem Statement:**

You work in XYZ Bank as a Machine Learning Engineer. The bank officials want you to build a system that can recognize hand written digits.

Tasks to be performed:

1. Using the MNIST Handwritten Digits dataset you have to build a model that can classify an image into a number from 0 to 9.
2. You have to load the digits
3. Analyze the shape of the data
4. Print some images to screen with their labels
5. Train a model
6. Make classifications on the model
7. Test the accuracy by visualizing a confusion matrix
8. Print and analyze some of the misclassified data