Deep Learning Lab

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Learning of neural network and getting hand-on experience on theory and programming in python was intended in the exercise. Artificial Neural Network(ANN) uses the processing of the brain as a basis to develop complex design or algorithms that can be used to model different cumbersome patterns and prediction of unseen with good probability.

Mechanics of Neural-networks:

We have inputs on layer-0 and from layer-1 and all the following hidden layers have weight and bias on each unit. Weights are initiated by random noise in the beginning which will eventually be optimized through 'n' iterations depending upon the number of data, choosed algorithm and hyper parameters. Different activation functions like Relu, Sigmoid, tanh etc are used so that we can model the complex (non-linear) problems as well instead of linear only.

Problems:
Understanding the given code was problem for me because I am new to python (having no computer science background). I needed lot of support from friends and I have looked up various concepts from the internet as well. Errors in the result were relatively higher than expected.