
Assignment: Deep Neural Net

Sandeep Nagar (sandeep.nagar@research.iiit.ac.in)

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This assignment is implimentation of DNN. You have to write your code in place of `##TODO` and run. Pytorch is used to implement neural networks. Starter code for Cifar10 and SGD scaffolding is given in Colab/Jupyter notebook.

1 Deep Neural Net/CNN

Implement the following...

Problem 1: Stochastic Gradient Descent (SGD), Momentum, Learning rate, Weight decay

Problem 2: Tuning the Network for MNIST.

Problem 3: Dropout.

Problem 4: Data Augmentation.

Problem 5: Batch Normalization.

2 Bonus problem:

Implement the following...

Norm Constraints, Polyak Averaging, Convolutional Network, Hyperparameter tuner.