

Machine Learning Assignment

Vaibhav IIT2019079

Github Link : [aquris/Machine_Learinig_ANN \(github.com\)](https://github.com/aquris/Machine_Learinig_ANN)

Algorithmic steps:

- 1). Reading the dataset from `dataset.txt`
- 2). Labeling of the different categorical features ('a1', 'a2', 'a3', 'a4', 'a5', 'a6', 'd1', 'd2') using binary identifiers [1,0]. Changing Yes to '1' and No to '0' for classification.
- 3) Normalising the dataset.
- 4) Taking training set upto 101 and rest is for testing.
- 3). Performing the forward and backward pass and report the weight matrices for the first three iterations.
- 4). Training the model for 50 epochs and then output the accuracy of the model on the test set.
- 5). Repeating the above steps for two hidden layers with 5 and 10 nodes by using the linear and sigmoid activation with two hidden layers.