Read Me for Assignment 4

Harikesh Kushwaha

You might find a number of files in this directory. So, here is a guide to what they are and what they do.

Directories

`data`

This directory contains the data files for the problems. The data files are in the `csv` format.

`Figures`

This directory contains the figures given to us in the assignment.

`nn`

This directory contains the module `nn` which I have written. It contains the implementation of the neural network. You can read more about the module in the file `Working_With_nn_Module`.

`plots`

This directory contains the plots generated by the `ipynb` notebooks.

`report`

This is the directory containing the `tex` file (and other generated files while compiling) for the **Take Home Assignment**

Files

`README.pdf`

This file. It contains information about the files in this directory.

`plots.pdf`

This file contains the plots generated by the `ipynb` notebooks and their inference.

`Notaions.pdf`

This file contains the notations used in the assignment and the `nn` module.

`APL745NN.ipynb`

This is the `ipynb` notebook and its pdf version. It contains the code for the neural network and the plots for the problems. Here I've solved the problems as are given by the steps in the notebook. For a more 'accurate' solution, please refer to the notebooks `Problem_1` and `Problem_2`.

Problem_1 and Problem_2

These are `ipynb` notebooks and their pdf versions. They contain the solutions to the problems using the module `nn` which I have written.

`Working_With_nn_Module`

This is a `ipynb` notebook and its pdf version. It contains the information about the module `nn` which I have written.