Manual

The code is split into 3 parts:

- Linear baseline.ipynb
- Shallow neural network.ipynb
- Statistical Hypothesis test.ipynb

The proposed solution itself is just **Shallow neural network.ipynb**, and can be run by simply opening it in any IDE that works with jupyter notebook files (such as Visual Studio Code), and running the cells in order.

IMPORTANT NOTE:

Do NOT just click “Run all” cells in the notebook if you just want to run the tool for a single data set. The final cell will run the network once for all 9 workloads (~25mins). Instead, run all cells up to the second-to-last cell, and then run that cell for the set of your choice. This can be done by uncommenting the relevant file name in the penultimate cell like so:

```
file = "corona"
#file = "jpeg-large"
#file = "smallbank-1"
#file = "beethoven.wav"
#file = "ambivert"
#file = "ambivert.wav.tar"
#file = "Johnny_1280x720_60_short.y4m"
#file = "artificl.tar"
#file = "AUFNIRA_z3.637557.smt2"
```

The code is designed so that you can run any other data set you want too, as long as it’s in the data sets folder and is in csv form. However, the hyperparameters will be automatically calculated and no assurances are made as to its accuracy beyond these initial 9 workloads.