**The zip file contains the following files:**

**NeuralNetwork.py**

**CsvReader.py**

**Analysis.py**

**ModelTester.py**

**FindModel.py**

**ApplyModelToTest.py**

**ApplyModelToTestfile.py**

**kfoldcrossvalidation.txt**

**How to run the code:**

Run **Analysis.py** to perform the 5-fold cross validation for hidden layer size in the range between 3 and 10. A log file named kfoldvalidation is also included in the zip file which has the results from my analysis. train.csv file should exist in the same directory.

Run **FindModel.py** to find the model weights with the chosen hidden layer size and initial weights. train.csv file should exist in the same directory.

Run **ApplyModelToTest.py** to apply the found model with the selected weights to the test portion in the training data set. train.csv file should exist in the same directory.

Run **ApplyModelToTestfile.py** to apply the found model with the selected weights to the test file provided by Kaggle. The result will be stored in testResults.csv. test.csv file should exist in the same directory.