

Question solution:

In this question, I use Tensorflow to construct my model.

First, I read data from 'train_data.txt', 'train_truth.txt' and 'test_data.txt'.

Then, I construct a 4-hdden-layer neural network with activation function 'relu'.

Next, I compile the model with loss function 'Mean Square Error' and train it for 50 epochs.

Finally, I get the predictions of the test data by the model.

Results:

(Prediction for the first ten instances are listed below. Complete predictions are in the file 'test_predicted')

y

0.5680303

0.51305133

0.74615353

0.56160474

0.13511568

0.32972464

0.28325924

0.6365263

0.35979703

0.63216335