OKAGBUE ONYEKA FRANCIS
CMPT 317
MARCH 30TH 2023
11279373

Easydata.txt

Results for data set 1
Learned weights were: [24.0, 165.0]
Error on TRAINING set: 1064674
Error on TEST set: 6719144

Results for data set 2
Learned weights were: [64.0, 1025.0]
Error on TRAINING set: 262064344
Error on TEST set: 41004274

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Total average test error: 23861709.0

Process finished with exit code 0

Gamesite.txt

Results for data set 1
Learned weights were: [28.823999999999938, 20976.431999999983]
Error on TRAINING set: 151502903063352
Error on TEST set: 1042659520645239

Results for data set 2
Learned weights were: [2046.3659999999982, 3345016.087999999]
Error on TRAINING set: 26515774530428734994
Error on TEST set: 3852604366160250971

******
Total average test error: 1.926823512840448e+18

Process finished with exit code 0

Is there a significant difference between the weights that were learned by using the two training sets?

If so, why do you think that is? Yes, there is a significant difference between both Data set and that is because of the output and input features and the data points differ from each other and they are both different dataset for the data points.

Is there a significant difference between the training error and the test error? If so, what does that
tell you? Yes, there is a significant difference between training and test error. The test error is much bigger than the training error and it makes the regression model to be overfitted than the training data.

Based on your results here, how well would you expect your regression to work on unseen data? So, based on the results here, the regression model may not really perform very well on these unseen data. The test data are much bigger and higher than the training errors which indicate overfitting with the data. And it would take some additional number of steps to get the unseen data and the overfitting of the training data may not be enough for fitting.