ENGR 421 Homework 3

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Text

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* In this part of the code libraries are imported. Data is read using pandas library. I created ytruth and yruthtest for confusion matrix.

Text

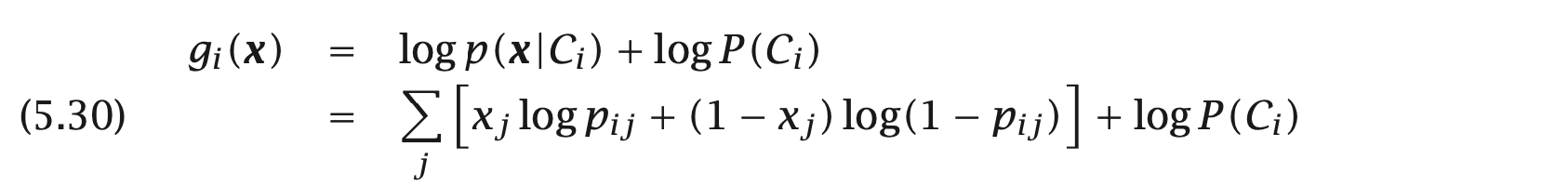
Description automatically generated

* Inside a for loop divided the data into two training and test sets, calculated mean and printed the results. Then I used imshow function to draw the letters however first I needed to use numpy reshape function to make the format correct.

Text

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* In this part I defined my score function using the equation in the book.



After defining the score function I used It inside two different for loops one for train and one for test set. I used these for loops for prediction. I used append to add my predictions to two lists ypredtrain and ypredtest. Finally, I printed the confusion matrix using pandas library.

Output

Background pattern

Description automatically generated

A picture containing background pattern

Description automatically generated

A picture containing qr code

Description automatically generated

A picture containing graphical user interface

Description automatically generated