Assignment 2 (20%)

CSE 5120 (Section 01) – Introduction to Artificial Intelligence – Fall 2022

Submitted to

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by

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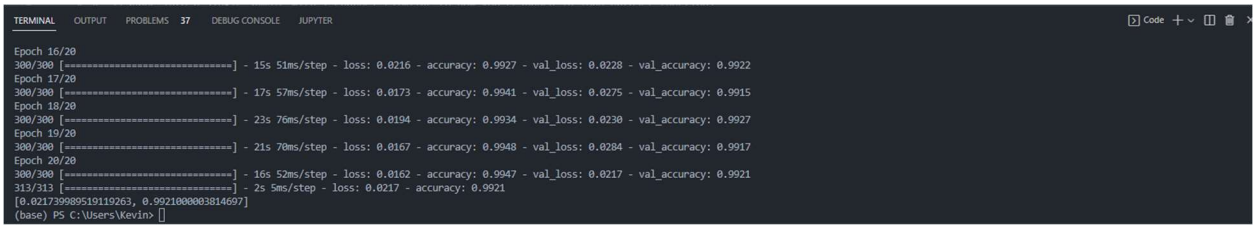
Assignment Report

Brief description of your work here acknowledging your collaboration with your class fellow (or a friend from other CSE 5120 section), and the capacity at which he/she collaborated with you, followed by the algorithms you implemented.

1. digitRecognizer.py for MNIST dataset

Your brief explanation of the dataset, your code solution, and any documentation with screenshots of your code Evaluation (results from digitRecognizer.py)

The dataset contains multiple images of numbers size 28 by 28 in black and white. The code first loads the dataset, reshapes them adding another channel, normalizes input then uses 'y' values to create it into categorical data. After having the data modified then a model fit is created to train the data. The model is then evaluated. The result is an array, [0.021739989519119263, 0.9921000003814697]. The Second most value is accuracy; the given model has an accuracy of 99%.



2. Evaluation (evaluation.py) for your model performance evaluation

You can also provide brief description of your code written in evaluation.py to load your saved model that can be readily used on test dataset for the staff.

The code written in evaluation is somewhat like the code written in digit Recognizer. The same dataset is used, data is reshaped and normalized as well same categories. The only difference is the model is loaded instead of created. The model is created similar too, except this time verbose is included. The accuracy is different as well.