Report for the Deep Learning Course Assignment 2

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Abstract

Should contain information about the current task and the summary of the study of the CNN models on CIFAR10 dataset.

1 Task 1

Should contain all needed information about Task 1 and report of all your experiments for that task.
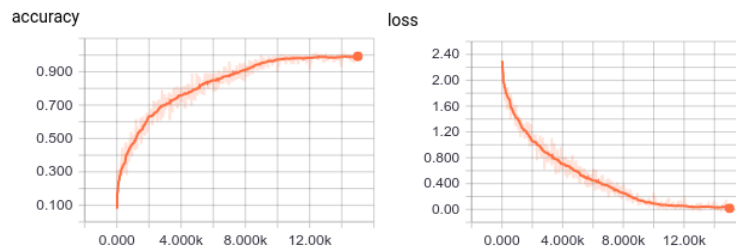
Figure 1, 2

Figure 1: Accuracy (left) and loss on the training set with batch size of 128 samples. The accuracy approximates 1.0 in the training set implying that the model overfits the training set.
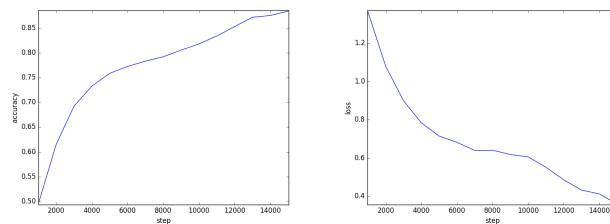

Figure 2: Accuracy (left) and loss on the test set with batch size of 128 samples. The accuracy is 0.88 after 15000 steps.

1.1 Smaller batch size

Figure 3, 4

2 Task 2

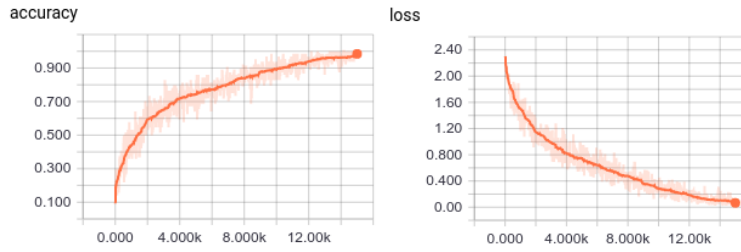Should contain all needed information about Task 2 and report of all your experiments for that task.

Figure 3: Accuracy (left) and loss on the training set with batch size of 128 samples. The accuracy approximates 1.0 in the training set implying that the model overfits the training set.
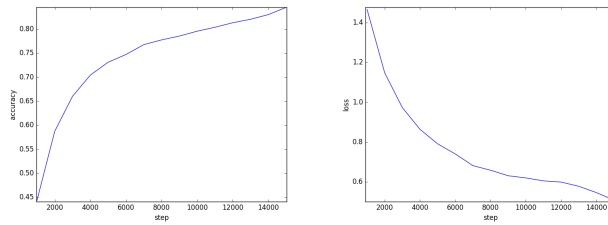

Figure 4: Accuracy (left) and loss on the test set with batch size of 128 samples. The accuracy is 0.88 after 15000 steps.
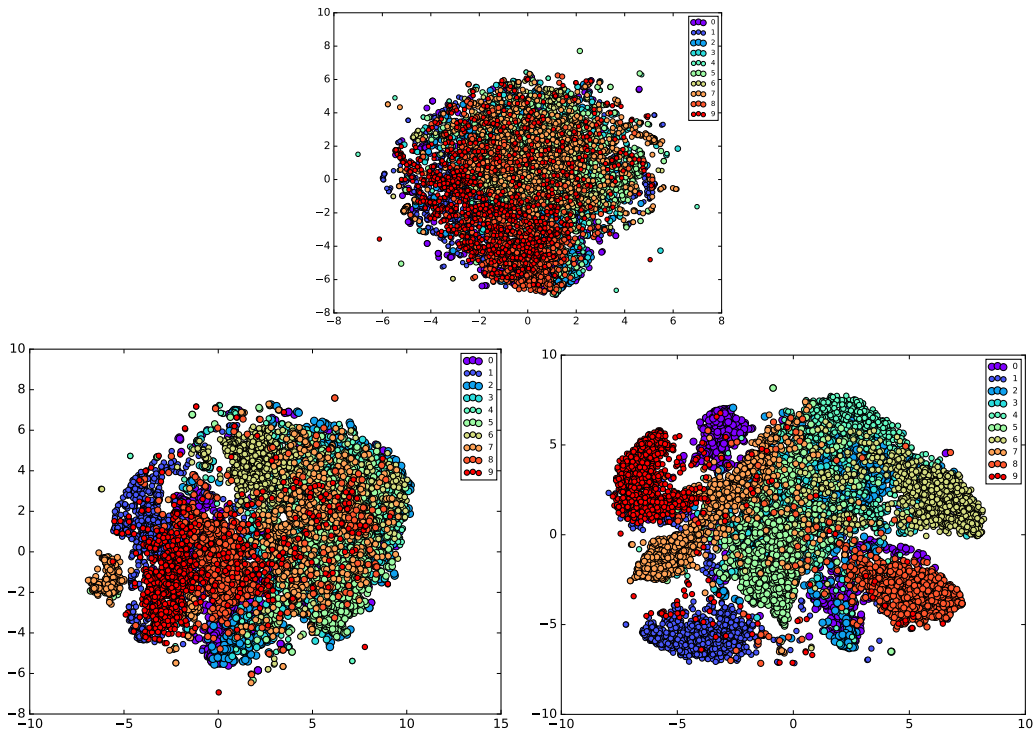

Figure 5: Visualization of the features in the 2-d space of the `flatten` layer (top), `fc1` (bottom-left), `fc2` (bottom-right).

3   Task 3

Should contain all needed information about Task 3 and report of all your experiments for that task.

4 Conclusion

Should contain conclusion of this study.