Peer-review HA1

Osvald Lindholm

September 29, 2020

1 Content and accuracy

The data preprocessing was were thorough and explained in an detailed manner! I think it was a good argument that cropping the resized image would perhaps destroy information, and therefor use padding. However, it doesn't look like you have normalized your dataset, which is a common step in preprocessing that makes the backpropagation more stable.

After your first CNN, the arguments for the overfitting were clear and relevant, even if it did not exactly result in what you expected this seems to be the correct approach when the dataset is overfitting. Perhaps a good idea also could be to reflect about the splitting of the dataset and if that could have affect the result.

Overall, I believe that your solutions are correct and complete. Each approach is thoroughly explained and the reasoning is always based on relevant facts and information.

2 Presentation/clarity

I think its a good visual aid that you print out images after the prepocessing step, so the reader is able to follow what actual transformations are being done, makes the transformation step less abstract.

The last plots in exercise 4.1 could have been more clear. Since the assignment was to compare the training and validation accuracies/losses for the vgg16 network when freezing the bottom layers vs when not feezing the bottom layer, it would be nice to have same amount of epochs presented in the plots. Perhaps the resulting accuracy/loss converges, however it is not clear for the reader how the accuracy/loss is distributed over epochs for the vgg16 with the frozen layers.

Overall, I think that the solutions are presented in a clear manner, which is easy to follow and and understand. The only thing that was less clear was when you compared the accuracy/loss of the validation and training set with different epochs.

To summarize, I think you got great results and that you did a very good job!