

Discussion:

I have used three optimizer for the assignment, and they are adam, RMSprop and SGD. I have kept the learning rate same which is 0.0005. At the beginning it was 0.01 then I changed it to 0.001 and then to 0.0001 but it would not give me the accurate result and there was a lot of overfitting so at the end I've used 0.0005. I have also used two regularizer which is L1 and L2 and the value of them are 0.001. They were fixed and constant the whole time. But they have to change it multiple times and modify it a lot to get the most accurate value and prevent overfitting. Adam optimizer took the most of the time for me to get accurate value as possible and prevent the overfitting, after finding the perfect measurements as I could for Adams optimizer and there was no overfitting the rest of the optimizers where slightly easier to train. I have used momentum for SGD and RMSprop which was 0.8 as I have known it Bing the best momentum value. Adam and RMSprop converge faster while SGD is simple but effective.

ID: 21-45612-3