

## Questions

1. Did you successfully get your assignment done? Did it run? Any error? Did you get the correct result? Did you test your program thoroughly?
2. How much time did you spend completing your assignment?
3. Did you find the assignment easy or challenging for you?
4. Did you write the program yourself? Did you get any help from anyone?
5. When you encountered obstacles to completing your program, how did you resolve the issues? Did you use Google to get help? Describe how Google was able or not able to assist you?
6. What did you learn from doing this assignment?
7. Any other information you would like to share with your instructor? Make sure you provide program output on each option.

## Answers

Yes, I have completed the assignment with success. I have run it multiple times, testing it thoroughly. I was able to get the correct results as given by the programs. I spent between five to six hours working on this assignment. I found this assignment a bit lighter than the previous one, probably because we had the programs ready, and we only needed to make sure that everything was working properly and that the concepts of a deep learning environment were understood. However, I enjoyed working on this project and I learned a lot. I was able to complete the assignment by myself, and luckily I did not have any obstacles that made me lose time. I found two errors in the given program to replicate but I was able to find the solution to the problem quickly. As you might notice, in the program for the CNN Computer Vision I have imported the SSL module to mitigate the error given in the certificate valid for

the dataset CIFAR-10. Also, in order to create a plot with matplotlib. pyplot the example shows the accuracy graph by using the values ['acc'] and ['val\_acc'] when the program identifies only if you define its entire name. Therefore, it is required to complete words such as ['accuracy'] and ['val\_accuracy'], as shown in the image below.

```
plt.plot(hist.history['acc'])  
plt.plot(hist.history['val_acc'])  
plt.title('Model accuracy')  
plt.ylabel('Accuracy')  
plt.xlabel('Epoch')  
plt.legend(['Train', 'Val'], loc='lower right')  
plt.show()
```

I have learned a lot working on this assignment. I was able to understand how a neural network is built and structured. I have learned how to manipulate data and how to use specific algorithms and functions in order to predict and recognize data. It was interesting looking at the output and trying to understand its importance in the ultimate scope. I will continue pursuing the implementation of deep learning structures and their applications.

Thank you!