Environment details

Python 3.7.12

Torch 1.11.0

Csv 1.0

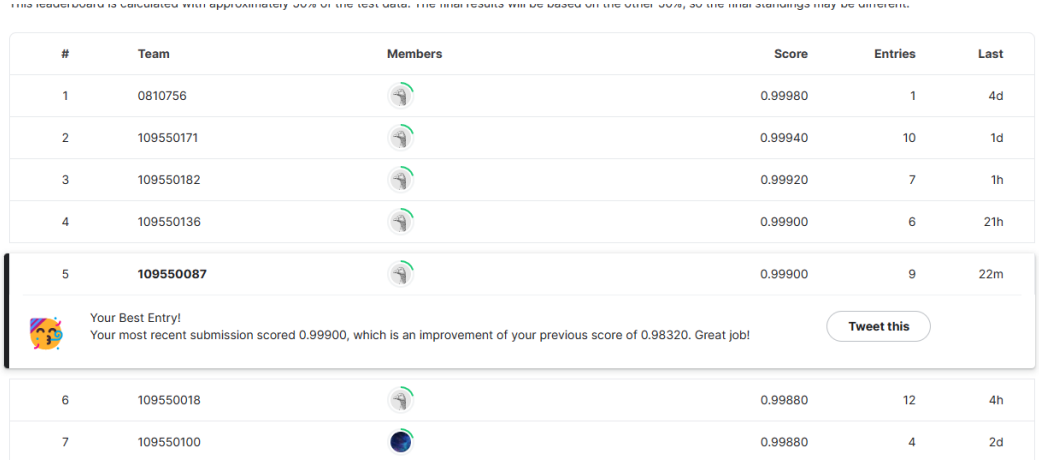
Cv2 4.5.4

Numpy 1.21.6

Implementation details

In this homework, I choose ResNet18 to be my model. It is a convolutional neural network architecture. ResNet18 uses residual connections, which are shortcut connections that bypass one or more layers and allow the network to learn residual functions. Also, as its name, it has 18 layers, including convolutional layers, pooling layers, and fully connected layers.

In terms of the hyperparameter, I used batch size = 64, learning rate = 1e-3 for task1 and 2, 0.0005 for task 3, epoch for task 1, 2, 3 is 20, 30, 50 respectively.



#	Team	Members	Score	Entries	Last
1	0810756		0.99980	1	4d
2	109550171		0.99940	10	1d
3	109550182		0.99920	7	1h
4	109550136		0.99900	6	21h
5	**109550087**		0.99900	9	22m
	Your Best Entry! Your most recent submission scored 0.99900, which is an improvement of your previous score of 0.98320. Great job!			Tweet this	
6	109550018		0.99880	12	4h
7	109550100		0.99880	4	2d

Model weight link:

Task1:

https://drive.google.com/file/d/1uwLXzMRaEIrNl1Y49fZIW7Z--_hXqmCj/view?usp=share_link

Tsak2:

https://drive.google.com/file/d/1I27oLJjVZLHKoiOgH8__723MAk_an1Rx/view?usp=share_link

Tsak3:

https://drive.google.com/file/d/1RbkVjPDgPP3p32Y-rVoqhoanypDJumWi/view?usp=share_link