### **REGISTRO PRUEBAS**

# Prueba 1

IMAGE\_SIZE = 220

BATCH\_SIZE = 20

LEARNING\_RATE = 0.001

MOMENTUM = 0.9

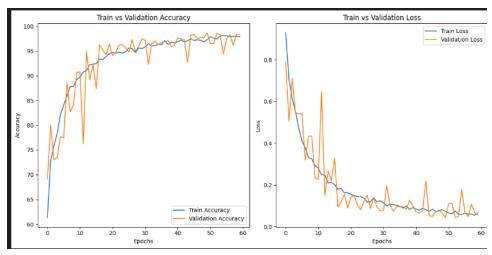
NUM\_EPOCH = 100

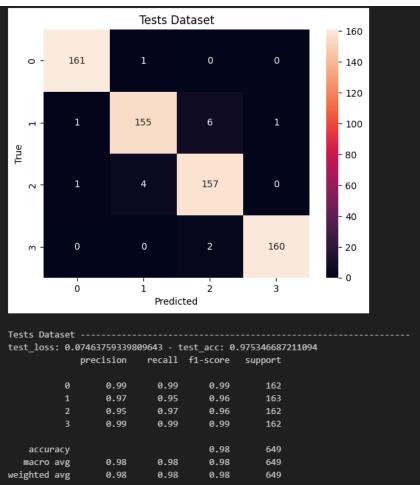
EARLY\_PATIENCE = 10

SCHEDULER\_PATIENCE = 6

DROPOUT1=0.5

Train Dataset	t				
train_loss: 6	0.0295779562	53627833 -	train_acc:	0.990524460114588	
	precision	recall	f1-score	support	
0	1.00	1.00	1.00	1134	
1	0.99	0.99	0.99	1134	
2	0.98	0.98	0.98	1135	
3	1.00	0.99	0.99	1135	
accuracy			0.99	4538	
macro avg	0.99	0.99	0.99	4538	
weighted avg	0.99	0.99	0.99	4538	
Val Dataset -					
val_loss: 0.0	9559068675484	429336 - v	al_acc: 0.9	330377794911334	
	precision	recall	f1-score	support	
0	0.99	0.99	0.99	325	
1	0.98	0.98	0.98	324	
2	0.97	0.97	0.97	324	
3	0.99	0.99	0.99	324	
accuracy			0.98	1297	
macro avg	0.98	0.98	0.98	1297	
weighted avg	0.98	0.98	0.98	1297	





# Prueba 2

IMAGE\_SIZE = 220

BATCH\_SIZE = 20

LEARNING\_RATE = 0.001

MOMENTUM = 0.9

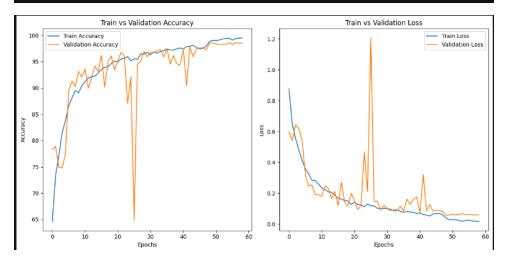
NUM\_EPOCH = 100

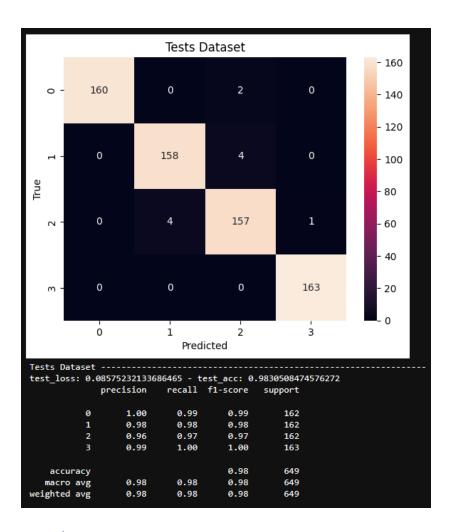
EARLY\_PATIENCE = 10

SCHEDULER\_PATIENCE = 6

DROPOUT1=0.25

Train Dataset					
train_loss: 0	0.0119179752	19505089 -	train_acc:	0.9966945791097	4
	precision	recall	f1-score	support	
0	1.00	1.00	1.00	1135	
1	1.00	0.99	0.99	1134	
2	0.99	1.00	0.99	1135	
3	1.00	1.00	1.00	1134	
accuracy			1.00	4538	
macro avg	1.00	1.00	1.00	4538	
weighted avg	1.00	1.00	1.00	4538	
Val Dataset -					
val_loss: 0.0	59043334251	327906 - v	al_acc: 0.9	853508095605242	
	precision	recall	f1-score	support	
0	1.00	0.99	0.99	324	
1	0.99	0.98	0.98	325	
2	0.97	0.98	0.97	324	
3	0.99	0.99	0.99	324	
accuracy			0.99	1297	
macro avg	0.99	0.99	0.99	1297	
weighted avg	0.99	0.99	0.99	1297	





## Prueba 3

IMAGE\_SIZE = 220

BATCH\_SIZE = 64

LEARNING\_RATE = 0.001

MOMENTUM = 0.9

NUM\_EPOCH = 100

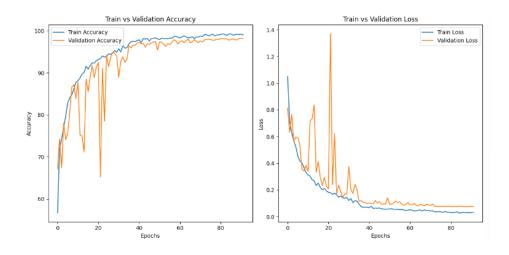
EARLY\_PATIENCE = 10

SCHEDULER\_PATIENCE = 6

DROPOUT1=0.25

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Irain Dataset					
train_loss: 0				0.9955927721463199	
	precision	recall	T1-score	support	
0	1.00	1.00	1.00	1135	
1	1.00	0.99	1.00	1134	
2	0.99	0.99	0.99	1134	
3	1.00	1.00	1.00	1135	
accuracy			1 00	4538	
	1.00	1 00			
weighted avg	1.00	1.00	1.00	4538	
Val Dataset -					
val_loss: 0.0				14957594448728	
	precision	recall	f1-score	support	
0	0.98	0.99	0.98	324	
1	0.99	0.98	0.98	325	
	0.97				
3	0.99				
,	0.55	0.55	0.55	324	
accuracy			0.98	1297	
macro avg	0.98	0.98	0.98	1297	
weighted avg	0.98	0.98	0.98	1297	





Tests Dataset ----test loss: 0.05154794979501854 - test acc: 0.9799691833590138 recall f1-score support precision 0.99 1.00 0 1.00 162 1.00 0.94 0.97 162 1 2 0.94 0.99 0.96 163 0.99 0.99 0.99 162 0.98 649 accuracy 0.98 0.98 0.98 649 macro avg weighted avg 0.98 0.98 0.98 649

## Prueba 4

IMAGE\_SIZE = 220

BATCH\_SIZE = 32

LEARNING\_RATE = 0.005

MOMENTUM = 0.9

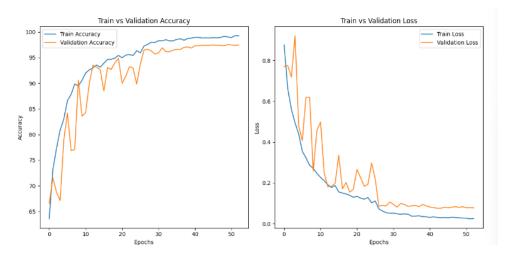
NUM\_EPOCH = 100

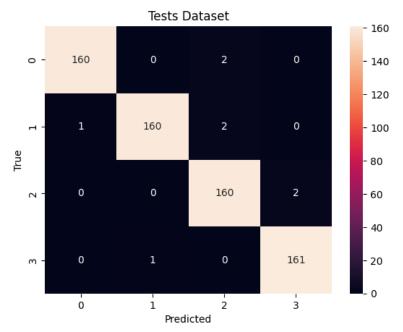
EARLY\_PATIENCE = 10

SCHEDULER\_PATIENCE = 6

DROPOUT1=0.25

Train Dataset				0.9958131335390039	
CLATH_TOSS: 6					
	precision	recall	T1-score	support	
0	1.00	1.00	1.00	1135	
1	1.00	1.00	1.00	1134	
2	0.99	0.99	0.99	1135	
3	1.00	1.00	1.00	1134	
accuracy			1.00	4538	
	1.00	1.00	1.00	4538	
weighted avg					
	2.00	2.00	2.00	1550	
Val Dataset					
val loss: 0.07					
vai_1033. 0.0					
	precision	Lecall	11-score	support	
_					
0			0.99		
	0.96				
2	0.96	0.96	0.96	324	
3	0.98	0.99	0.99	325	
accuracy			0.97	1297	
	0.97	0.97	0.97	1297	
weighted avg					





Tests Dataset ----test\_loss: 0.06291476419955004 - test\_acc: 0.987673343605547 recall f1-score support precision 0 0.99 0.99 0.99 162 1 0.99 0.98 0.99 163 2 0.98 0.99 0.98 162 3 0.99 0.99 0.99 162 0.99 649 accuracy 0.99 0.99 macro avg 0.99 649 weighted avg 0.99 0.99 649 0.99

## Prueba 5

IMAGE\_SIZE = 220

BATCH\_SIZE = 32

LEARNING\_RATE = 0.01

MOMENTUM = 0.9

NUM\_EPOCH = 100

EARLY\_PATIENCE = 10

SCHEDULER\_PATIENCE = 6

DROPOUT1=0.25

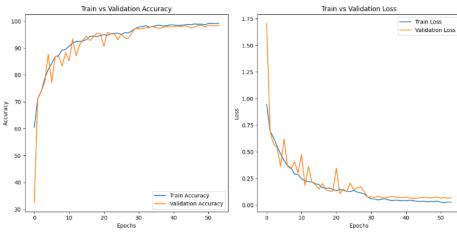
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	.015638088960	361233 -	train_acc:	0.9944909651828999	
	precision	recall	f1-score	support	
0	1.00	1.00	1.00	1135	
1	1.00	0.99	0.99	1134	
2	0.99	0.99	0.99	1134	
3	1.00	0.99	1.00	1135	

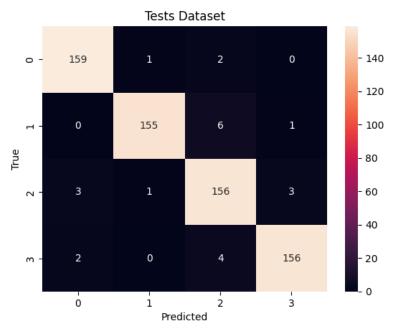
3	1.00	0.99	1.00	1135
accuracy macro avg weighted avg	0.99 0.99	0.99 0.99	0.99 0.99 0.99	4538 4538 4538

Val Dataset -----

val_loss: 0.0			_	38087895142636	
	precision	recall	f1-score	support	
0	0.99	1.00	1.00	324	
1	1.00	0.97	0.98	325	
2	0.97	0.98	0.97	324	
3	0.98	0.98	0.98	324	
accuracy			0.98	1297	
macro avg	0.98	0.98	0.98	1297	
weighted avg	0.98	0.98	0.98	1297	



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Tests Dataset -----test\_loss: 0.1336777573007913 - test\_acc: 0.9645608628659477 precision recall f1-score support 0 0.97 0.98 0.98 162 0.96 162 1 0.99 0.97 2 0.93 0.96 0.94 163 3 0.97 0.96 0.97 162 accuracy 0.96 649 macro avg 0.97 0.96 0.96 649 weighted avg 0.96 0.96 649

## Prueba 6

IMAGE\_SIZE = 220

BATCH\_SIZE = 32

LEARNING\_RATE = 0.1

MOMENTUM = 0.9

NUM\_EPOCH = 100

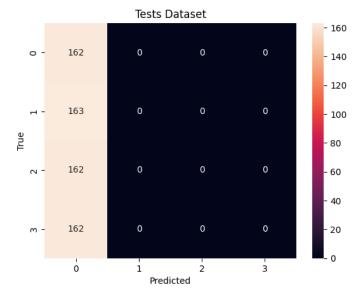
EARLY\_PATIENCE = 10

SCHEDULER\_PATIENCE = 6

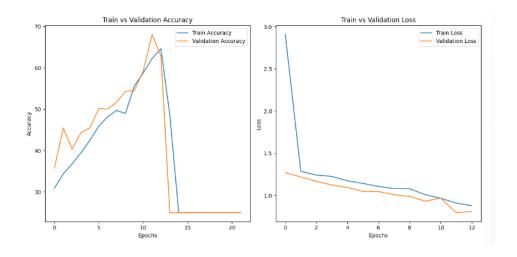
DROPOUT1=0.25

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		Ероспа			-
Train Dataset					
train loss: r	an - train a	acc: 0.250	11018069634	12	
_			f1-score		
0	0.25	1.00	0.40	1135	
1	0.00	0.00	0.00	1134	
2	0.00	0.00	0.00	1134	
3	0.00	0.00	0.00	1135	
accuracy				4538	
macro avg	0.06	0.25	0.10	4538	
weighted avg	0.06	0.25	0.10	4538	
Val Dataset -					
val loss: nar					
va1_1055; mar			f1-score		
	precision	Lecall	11-score	Support	
0	0.25	1.00	0.40	324	
1	0.00	0.00	0.00	324	
2	0.00	0.00	0.00	325	
3	0.00	0.00	0.00	324	
accuracy				1297	
	0.06		0.10	1297	
weighted avg	0.06	0.25	0.10	1297	



Tests Dataset ----test\_loss: nan - test\_acc: 0.24961479198767333 precision recall f1-score support 0.40 0.00 0.00 0.00 0.25 1.00 162 0 1 2 3 0.00 0.00 0.00 0.00 0.00 0.00 163 162 162 0.25 0.10 649 649 accuracy 0.06 0.25 macro avg weighted avg 0.06 0.25 0.10 649



# Prueba 7

IMAGE\_SIZE = 220

BATCH\_SIZE = 32

LEARNING\_RATE = 0.05

MOMENTUM = 0.9

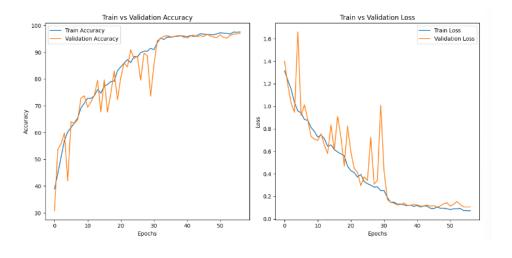
NUM\_EPOCH = 100

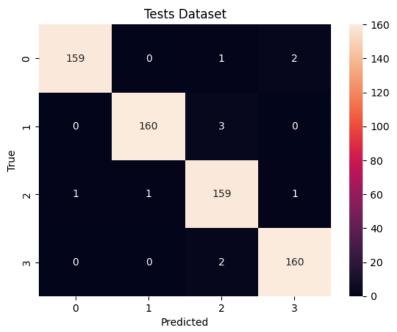
EARLY\_PATIENCE = 10

SCHEDULER\_PATIENCE = 6

DROPOUT1=0.25

train_loss: 0.04702907108249221 - train_acc: 0.9839136183340679						
0 0.99 0.99 0.99 1135 1 0.98 0.99 0.98 1134 2 0.98 0.97 0.97 1134 3 0.99 0.99 0.99 1135 accuracy 0.98 4538	train_loss: (					
1 0.98 0.99 0.98 1134 2 0.98 0.97 0.97 1134 3 0.99 0.99 0.99 1135 accuracy 0.98 4538		precision	recall	f1-score	support	
1 0.98 0.99 0.98 1134 2 0.98 0.97 0.97 1134 3 0.99 0.99 0.99 1135 accuracy 0.98 4538						
2 0.98 0.97 0.97 1134 3 0.99 0.99 0.99 1135 accuracy 0.98 4538						
3 0.99 0.99 0.99 1135 accuracy 0.98 4538			0.99	0.98	1134	
accuracy 0.98 4538		0.98	0.97	0.97	1134	
,	3	0.99	0.99	0.99	1135	
,						
macro avg 0.98 0.98 0.98 4538	accuracy			0.98	4538	
	macro avg	0.98	0.98	0.98	4538	
weighted avg 0.98 0.98 0.98 4538	weighted avg	0.98	0.98	0.98	4538	
Val Dataset						
val_loss: 0.106960127124472 - val_acc: 0.9699306090979183	val_loss: 0.1					
precision recall f1-score support		precision	recall	f1-score	support	
0 0.99 0.98 0.99 324	0	0.99	0.98	0.99	324	
1 0.95 0.96 0.95 324			0.96	0.95	324	
2 0.94 0.95 0.95 325	2	0.94	0.95	0.95	325	
3 0.99 0.99 0.99 324	3	0.99	0.99	0.99	324	
accuracy 0.97 1297	accuracy			0.97	1297	
macro avg 0.97 0.97 0.97 1297	macro avg	0.97	0.97	0.97	1297	
weighted avg 0.97 0.97 1297	weighted avg	0.97	0.97	0.97	1297	





Tests Dataset -----test\_loss: 0.06514879803927172 - test\_acc: 0.9830508474576272 precision recall f1-score support 0 0.99 0.98 0.99 162 1 0.99 0.98 0.99 163 0.96 0.98 0.97 162 0.98 0.99 162 649 0.98 accuracy 0.98 0.98 macro avg 0.98 649

0.98

0.98

649

## Prueba 8

IMAGE\_SIZE = 220

weighted avg

BATCH\_SIZE = 64

LEARNING\_RATE = 0.005

0.98

MOMENTUM = 0.9

NUM\_EPOCH = 100

EARLY\_PATIENCE = 10

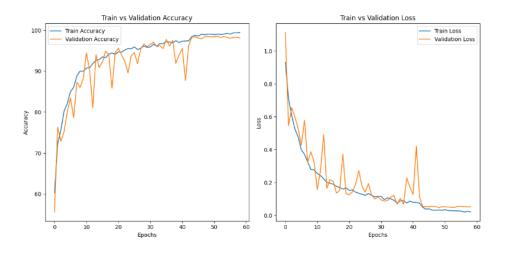
SCHEDULER\_PATIENCE = 6

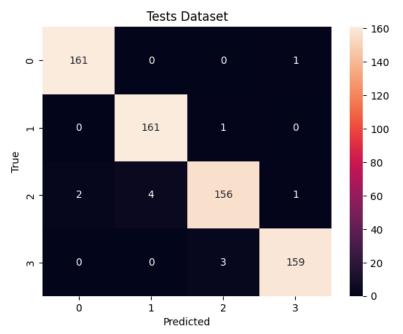
DROPOUT1=0.5

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Train Dataset					
train_loss: 0	.01326808729 precision		_	0.996033494931688 support	
0	1.00	1.00	1.00	1135	
1	1.00	1.00	1.00	1135	
2	0.99	0.99	0.99	1134	
3	0.99	0.99	0.99	1134	
accuracy			1.00	4538	
macro avg	1.00	1.00	1.00	4538	
weighted avg	1.00	1.00	1.00	4538	

var_10ss: 0.0	1536/51946366	0000904 - Val_acc: 0.900/24/49421/4/				
	precision	recall	f1-score	support		
0	1.00	0.99	1.00	324		
1	0.97	0.99	0.98	324		
2	0.97	0.96	0.97	324		
3	0.99	0.98	0.98	325		
accuracy			0.98	1297		
macro avg	0.98	0.98	0.98	1297		
weighted avg	0.98	0.98	0.98	1297		





Tests Dataset ----test\_loss: 0.06434736394190363 - test\_acc: 0.9815100154083205 precision recall f1-score support 0.99 0.99 0.99 162 0 0.98 0.98 0.99 162 1 2 0.97 0.96 0.97 163 0.99 0.98 0.98 162 accuracy 0.98 649 macro avg 0.98 0.98 0.98 649 weighted avg 0.98 0.98 0.98 649

## Prueba 9

IMAGE\_SIZE = 220

BATCH\_SIZE =32

LEARNING\_RATE = 0.001

MOMENTUM = 0.9

NUM\_EPOCH = 100

EARLY\_PATIENCE = 10

SCHEDULER\_PATIENCE = 6

DROPOUT1=0.25

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Train Dataset					
train_loss: 0.	01584042328	7467993 -	train_acc:	0.99669457910974	4
	precision	recall	f1-score	support	
0	1.00	1.00	1.00	1135	
1	1.00	1.00	1.00	1134	
2	0.99	0.99	0.99	1134	
3	1.00	1.00	1.00	1135	
accuracy			1.00	4538	
macro avg	1.00	1.00	1.00	4538	
weighted avg	1.00	1.00	1.00	4538	
Val Dataset					
val_loss: 0.03	375825172750	18844 - va	al_acc: 0.9	868928296067849	
_	precision	recall	f1-score	support	
0	1.00	1.00	1.00	324	
1	0.98	0.98	0.98	324	
2	0.98	0.98	0.98	325	
3	0.98	1.00	0.99	324	

0.99 0.99 0.99

1297

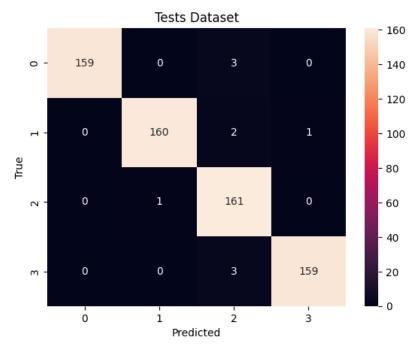
1297 1297

0.99 0.99

0.99 0.99

accuracy macro avg weighted avg

	Train vs Validation Accuracy	Train vs Validation Loss
100 -	Train Accuracy Validation Accuracy	Train Loss Validation Loss
90 -	My My	0.8 -
Accuracy 88		9.6 - 85 3
70 -		0.4
60 -	0 10 20 30 40 50 60 70 Epochs	0.0 10 20 30 40 50 60 70 Epochs



Tests Dataset -----test\_loss: 0.07336527015043733 - test\_acc: 0.9845916795069337 precision recall f1-score support 1.00 0.98 0.99 0.99 1 0.98 0.99 163 2 0.95 0.99 0.97 162 0.99 0.98 0.99 162 0.98 649 accuracy macro avg weighted avg 0.99 0.98 0.98 649 0.99 0.98 0.98 649