CIFAR Corrupted vs Uncorrupted Report

LN Pandey

13 September 2019

Analysis of Accuracy on Training & Testing Data

corruption level	Train accuracy on corrupted train-data			Test accuracy on corrupted test data			Test accuracy on true data
	corrupted	un-corrupted	full	corrupted	un-corrupted	full	
0%	-NIL-	1	1	-NIL-	-NIL-	-NIL-	0.83
5%	1	1	1	0.0858	0.7830	0.7481	0.78
10%	1	1	1	0.1028	0.7509	0.6841	0.75
20%	1	1	1	0.1028	0.6659	0.5505	0.66
30%	1	1	1	0.1019	0.5864	0.4405	0.58
40%	1	1	1	0.1031	0.5058	0.3462	0.50
50%	1	1	1	0.0970	0.4252	0.2625	0.42
100%	0.99	-NIL-	0.99	0.1084	-NIL-	0.1084	0.10

Analysis of Cross Entropy Loss on Training & Testing Data

corruption level	Train cross entropy loss on train-data			Test cross entropy loss on test-data			Test CE loss on true data
	corrupted	un-corrupted	full	corrupted	un-corrupted	full	
0%	-NIL-	0.0014	0.0014	-NIL-	-NIL-	-NIL-	0.7550
5%	0.0008	0.0001	0.0002	11.9317	1.0995	1.6422	1.1018
10%	0.0005	0.0001	0.0002	11.2546	1.3577	2.3781	1.3478
20%	0.0004	0.0001	0.0002	10.2894	1.8734	3.5995	1.8783
30%	0.0004	0.0001	0.0002	9.8259	2.4355	4.6615	2.4304
40%	0.0004	0.0002	0.0002	9.3006	2.9981	5.4971	3.0478
50%	0.0004	0.0002	0.0003	9.1102	3.9016	6.4840	3.9291
100%	0.0014	-NIL-	0.0014	9.1871	-NIL-	9.1871	9.1803