

Classification error (%) on the first 1000 test samples

		original	mnist		original	fashion_mnist	
			scenario 1	scenario 2		scenario 1	scenario 2
UNENCRYPTED	CW $I_2$	0.97	100		8.66	100	
	CW $I_0$		100			100	
	CW $I_\infty$		100			100	
	FGSM	1.5	82.94		10.62	94.25	
PERMUTATED	CW $I_2$	3.63	100	4.5	12.4	100	12.7
	CW $I_0$		100	7.3		100	
	CW $I_\infty$		100			100	
	FGSM	3.02	89.14		12.04	91.82	
ECB	CW $I_2$	encrypt v1	16.58		55.66	irrelevant	irrelevant
		encrypt v2	18.11		41.97		
	FGSM	encrypt v1	20.88		59.23		
		encrypt v2	19.95		46.25		
CBC	CW $I_2$	encrypt v1	64.07	irrelevant	72.12	irrelevant	irrelevant
		encrypt v2	69.12		64.47		
	FGSM	encrypt v1	88.65		90		
		encrypt v2	88.65		90		
CTR	CW $I_2$	encrypt v1	88.65	irrelevant	90	irrelevant	irrelevant
		encrypt v2	88.65		90		
	FGSM	encrypt v1	88.65		90		
		encrypt v2	88.65		90		

scenario 1 : the attacker gets the model he's trying to attack, i.e. he knows the permutation

scenario 2: the attacker gets only the architecture of the model, i.e. he doesn't know the permutation

accuracies of permutation on different image sizes  
(padding done with 0's around the original)

	image size	error rate	min/epoch
mnist	28x28	3.63	4
	40x40	2.65	5
	60x60	2.69	12
	100x100	2.3	14
fashion_mnist	28x28	12.4	
	40x40	12.07	13
	60x60		
	100x100		