

Left Image = Clean Image Right Image = Image after adding adversarial noise

FGSM:

1) Epsilon = 0.1

True Label: horse Predicted Label: horse Predicted Label after Attack: cat
True Label: bird Predicted Label: bird Predicted Label after Attack: cat

pred: 7, adv:3

pred: 2, adv:3



True Label: plane Predicted Label: plane Predicted Label after Attack: bird
True Label: car Predicted Label: car Predicted Label after Attack: truck

pred: 0, adv:2

pred: 1, adv:9



2) Epsilon = 0.15

True Label: plane Predicted Label: plane Predicted Label after Attack: ship
True Label: ship Predicted Label: ship Predicted Label after Attack: car

pred: 0, adv:8

pred: 8, adv:1



True Label: ship Predicted Label: ship Predicted Label after Attack: plane
True Label: bird Predicted Label: bird Predicted Label after Attack: plane

pred: 8, adv:0

pred: 2, adv:0



Epsilon = 0.2

True Label: dog Predicted Label: dog Predicted Label after Attack: bird
True Label: car Predicted Label: car Predicted Label after Attack: truck

pred: 5, adv:2

pred: 1, adv:9



True Label: ship	Predicted Label: ship	Predicted Label after Attack: plane
True Label: deer	Predicted Label: deer	Predicted Label after Attack: bird
pred: 8, adv:0	pred: 4, adv:2	



2. Iterative FGSM

All the images are for 10 iterations.

Left image = clean image , Middle image = Image after adding adversarial noise, Right = Adversarial Noise

1) Epsilon = 0.075

True Label: deer	Predicted Label: deer	Predicted Label after Attack: bird
True Label: dog	Predicted Label: dog	Predicted Label after Attack: bird
pred: 4, adv:2	pred: 5, adv:2	



True Label: frog	Predicted Label: frog	Predicted Label after Attack: car
True Label: dog	Predicted Label: dog	Predicted Label after Attack: bird
pred: 6, adv:1	pred: 5, adv:2	



2) Epsilon = 0.1

True Label: deer	Predicted Label: deer	Predicted Label after Attack: frog
True Label: cat	Predicted Label: cat	Predicted Label after Attack: frog
pred: 4, adv:6	pred: 3, adv:6	



True Label: deer Predicted Label: deer Predicted Label after Attack: truck
 True Label: horse Predicted Label: horse Predicted Label after Attack: dog
 pred: 4, adv:9 pred: 7, adv:5



3) Epsilon = 0.15

True Label: deer Predicted Label: deer Predicted Label after Attack: bird
 pred: 4, adv:2



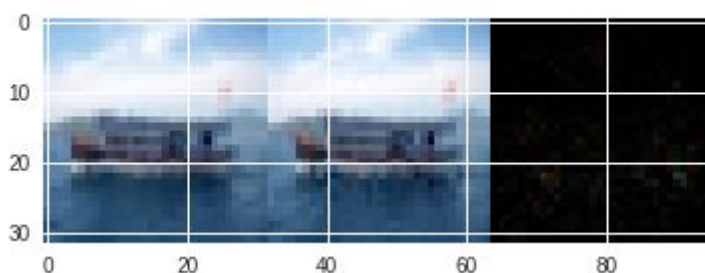
True Label: plane Predicted Label: plane Predicted Label after Attack: ship
 pred: 0, adv:8



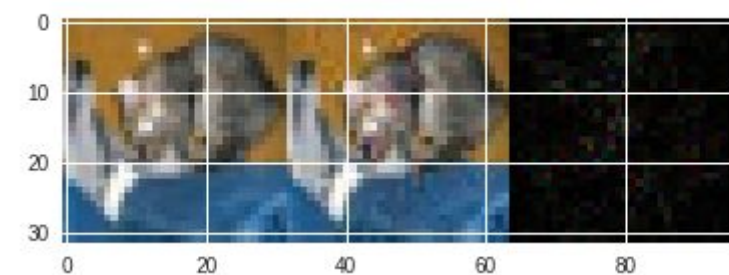
3 DeepFool

Left image = clean image , Middle image = Image after adding adversarial noise, Right = Adversarial Noise

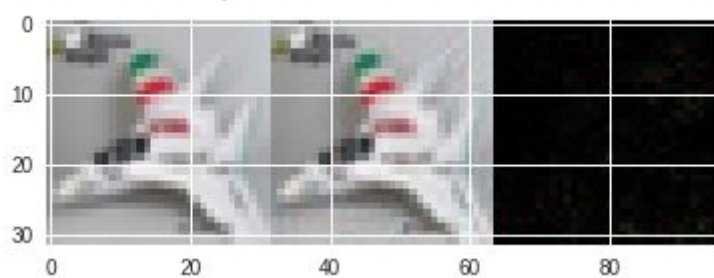
Clean Label: ship Adversarial Label: plane



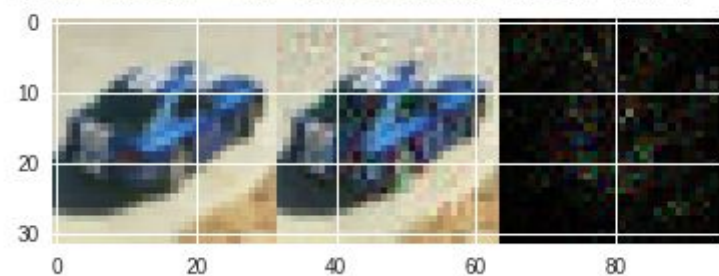
Clean Label: cat Adversarial Label: dog



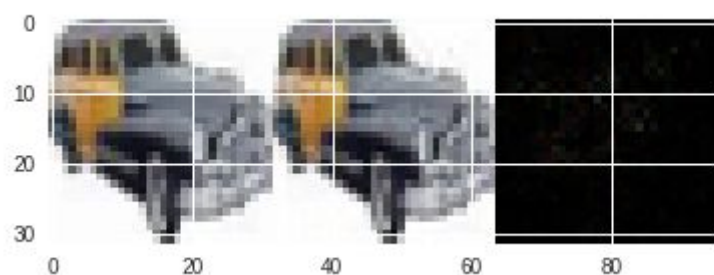
Clean Label: plane Adversarial Label: bird



Clean Label: car Adversarial Label: truck

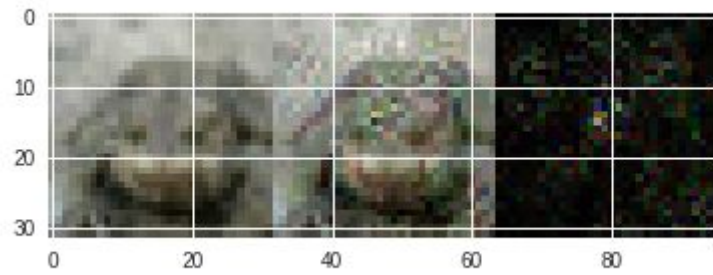


Clean Label: car Adversarial Label: truck



Some examples where the DeepFool algorithm added too much noise

Clean Label: frog Adversarial Label: bird



Clean Label: ship Adversarial Label: car

