Sayantan Dutta

• Choose 5-6 pictures of generated images to show how training progresses

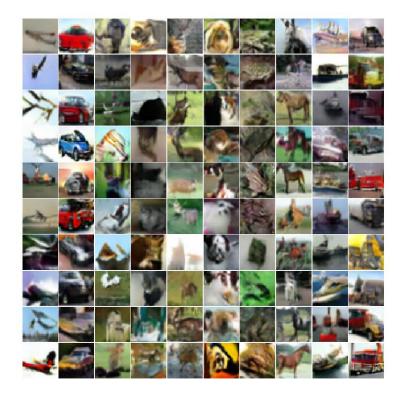
Epoch 0



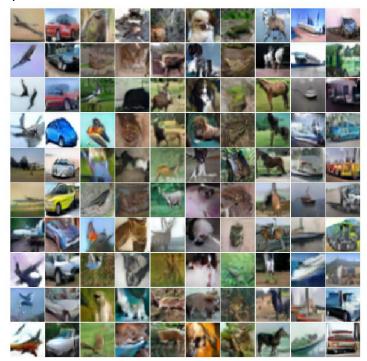
Epoch 20

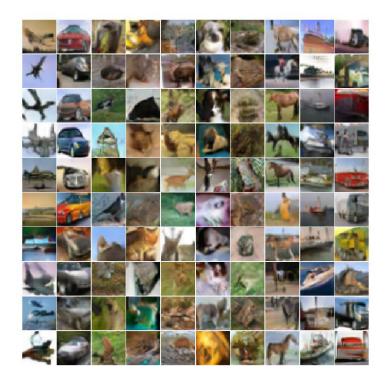


Epoch 100

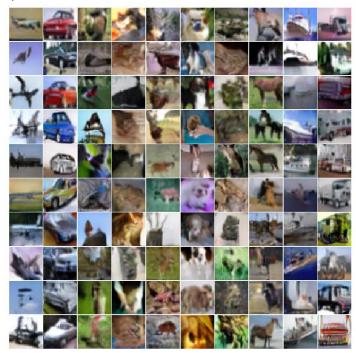


Epoch 140





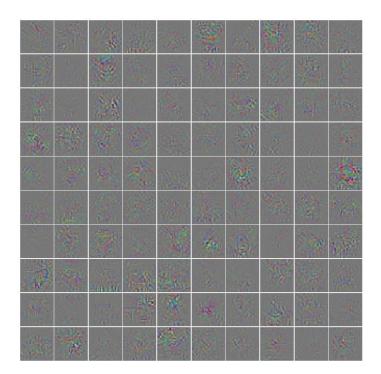
Epoch 190



• A batch of real images, a batch of the gradients from an alternate class for these images, and the modified images the discriminator incorrectly classifies.



(Real images)



(Gradients images)



(Jittered images the discriminator incorrectly classifies)

• Synthetic images maximizing the class output. One for the discriminator trained without the generator and one for the discriminator trained with the generator.

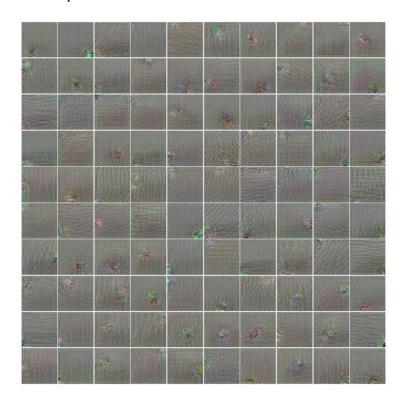


(Discriminator trained without the generator)

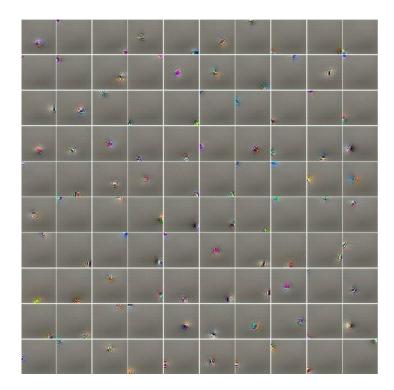


(Discriminator trained with the generator)

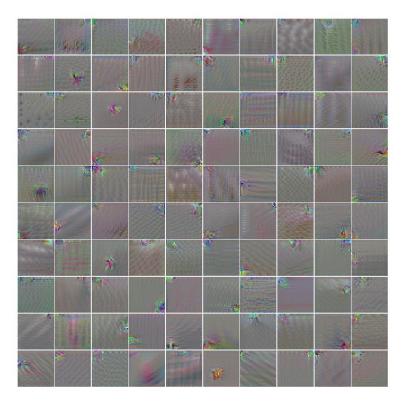
 Synthetic images maximizing a particular layer of features. Do this for at least two different layers.



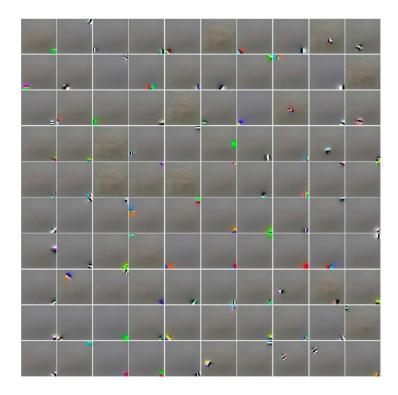
Discriminator trained without the generator (Layer 4) (Fig: max_features_4_without_G.png)



Discriminator trained without the generator (Layer 2) (Fig: max_features_2_without_G.png)



Discriminator trained with the generator (Layer 4) (Fig: max_features_4_with_G.png)



Discriminator trained with the generator (Layer 2) (Fig: max_features_2_with_G.png)

• Test accuracy for the two discriminators.

Discriminator without generator, test accuracy: 88%

Discriminator with generator, test accuracy: 83.31%