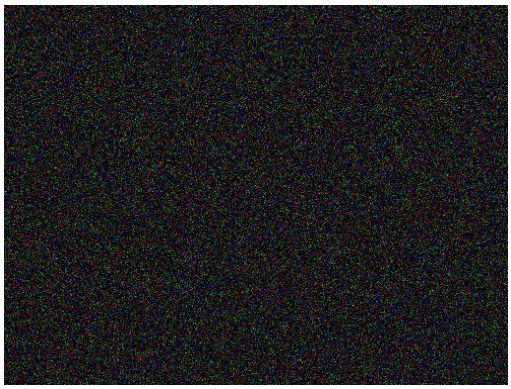
SMAI Team3 - Neural Style Transfer

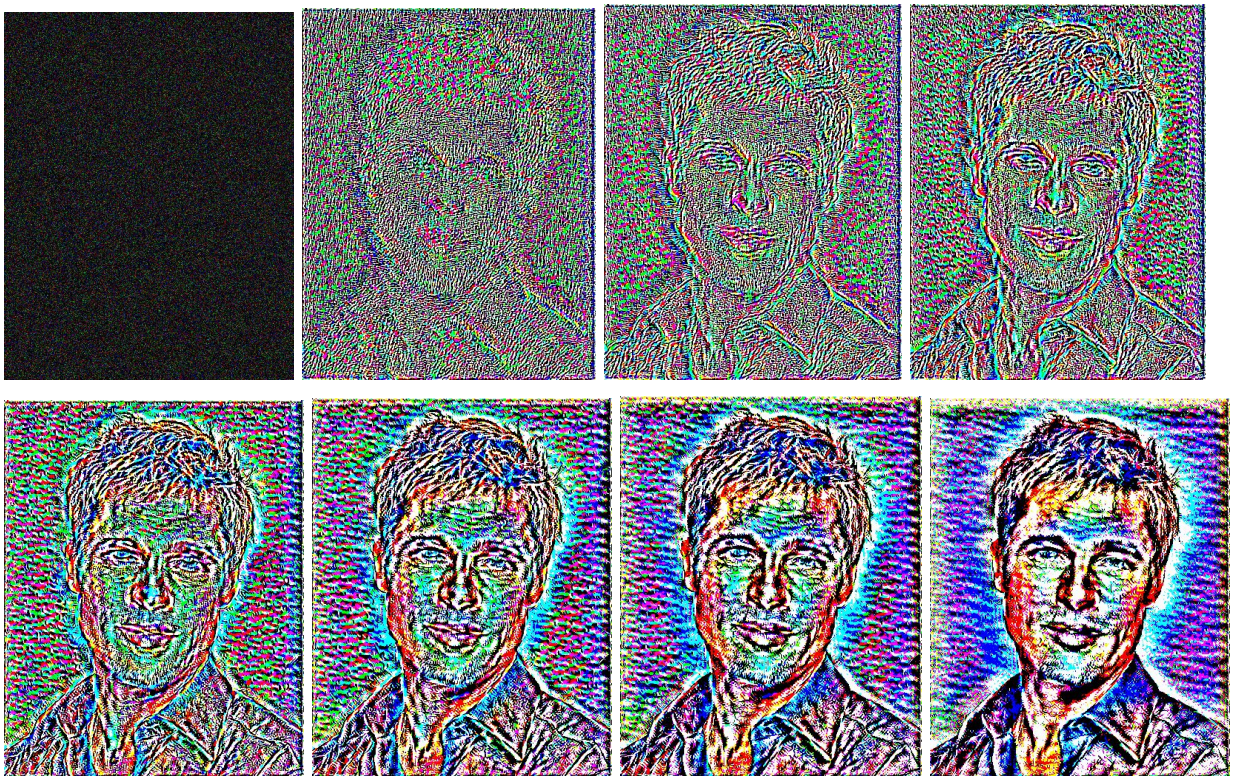
Results of only Content Loss Modules:
(We tested this on 3 of the most popular images that have been used for style transfer by a lot of people and in their various papers)

1) Image - tubingen.jpg

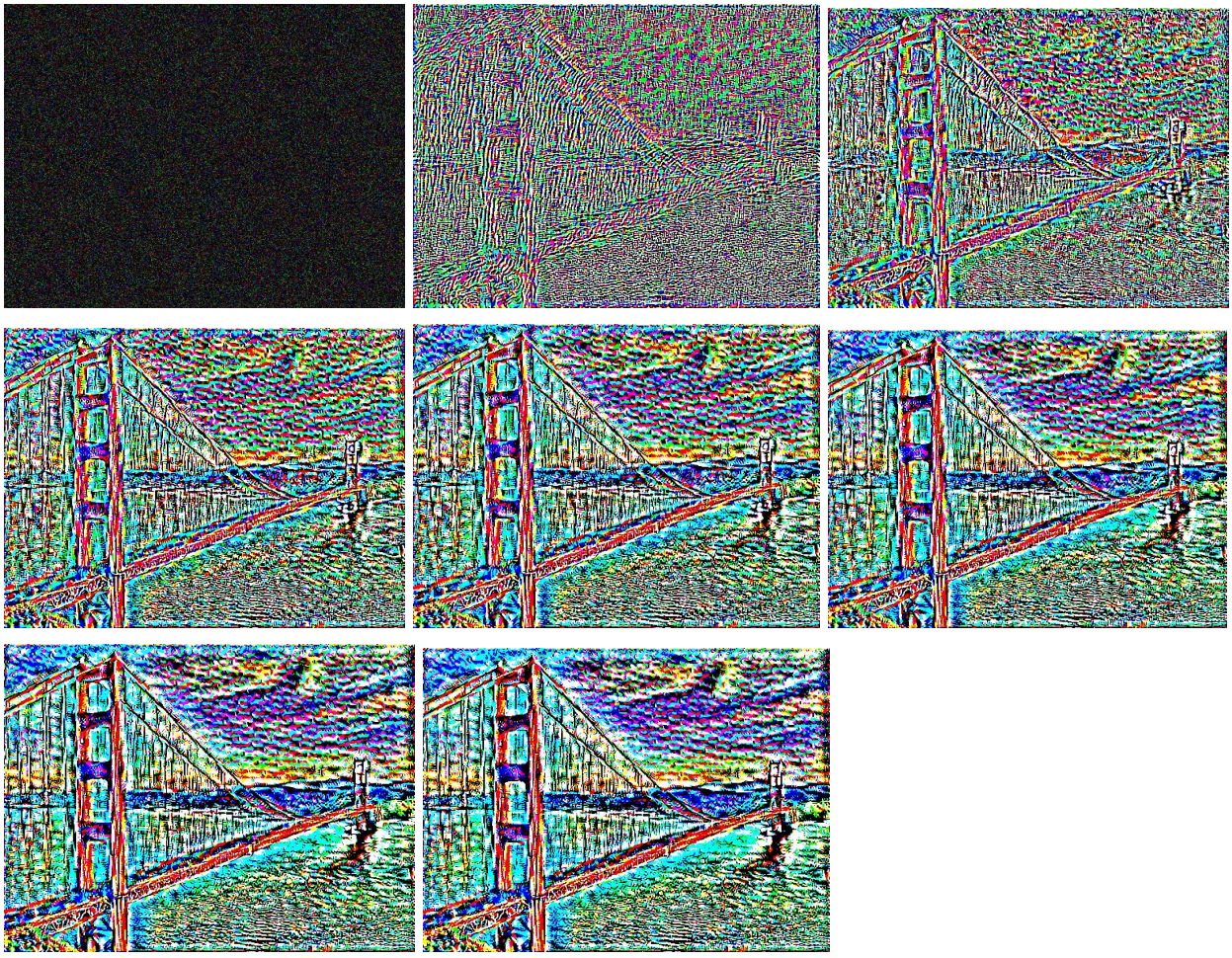




2) Image - brad_pitt.jpg



3) Image - golden_gate.jpg



Conclusions:

We can see that the content representations generated by the content loss modules broadly capture the shape of the image and on enough iterations start capturing the color and other properties present as well. What we would eventually be doing is to add in the style losses alongside these content losses so that we get a balance between the style and the content where we reduce the overall loss.

With this kind of an approach, since they are both being optimized we would get a mixture of both the style from one image and the content from another image merged together to form a new image.

Starting with a white noise image and running it through the network for a few iterations we would start transforming the noise into something more meaningful (In this case just the content image). So this enables us to do a “style” transfer from one image(style image) to another(content image).