

Colorization Using Conditional-GANs

Team: HASHeD

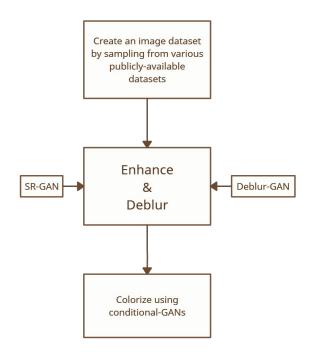
Team Members

- Overview:- An image translator using GAN, potent enough to deblur a b/w image (convert lower-resolution images to higher) and produce a colorized version of it as an output.
- Dataset:- We'll be using a fabricated subset of CIFAR, ImageNet, Pascal VOC, Flickr. Diversity is incorporated for better generalization and quality.
- Baseline work:- "Image-to-Image Translation with Conditional Adversarial Networks", Computer Vision and Pattern Recognition(CVPR 2016)
- Improvements:- A super-resolution block to increase the quality of images before passing it on for colorization, extending the baseline work on images to motion pictures.

Future Scope

- Apart from colourization, we can also develop a GAN which will stylize the image/video (coloured or gray scale) using the template image/Video provided by the user.
- Segment the video such that only a single frame is required to colourize that particular segment. This approach will reduce the run time of our model.

Workflow



THANK YOU

Any questions?