Correction by Projection: Denoising Images with Generative Adversarial Networks

2018 Subarna Tripathi, Zachary C. Lipton, Truong Q. Nguyen

Abstract

Generative Adversarial Networks transform the low-dimensional latent vectors into visually plausible images. In this paper they propose a denoise corrupted images by finding the nearest point on GANs.

They are producing a denoised image better than the older method/technique of BM3D and produce an better denoised image using GANs.

Introduction

In this they presented about denoising corrupted images by finding nearest point on the GANs so that GANs only contain clean images.

They show that latent code recovery can be used for denoising and deblurring images which is generated by GANs.

They are using DCGAN to achieve a higher quality denoised image which is better than the BM3D, and using Stochastic clipping method to outperform projected gradient. Stochastic clipping generates higher quality image then PSNR without clipping strategy. Sharpness leads to higher quality image denoising than simple latent vector recovery-based method.

Survey

With the help of this technique we can combine it with the SRGAN to produce a denoised and higher quality image in our project.