**2017- Least squares generative adversarial networks**

Regular GANs hypothesize the discriminator as a classifier with the sigmoid cross entropy loss function.

We found that this loss function may lead to the vanishing gradients problem during the learning process.

LS-GAN (Least Squares Generative adversarial networks) is the solution used to overcome this problem. (adopts least square loss function for discriminator)

Two benefits of LSGANs over regular GANs: -

1. LSGANs generate higher quality images.
2. LSGANs perform more stable during learning process.

5-different data sets are used to prove these.