

# StyleGAN based architectures

Andrija Djurisić

15.12.2020.

## 1 Math

$$J(\theta) = -\frac{1}{m} \sum_{i=1}^m \log(D_{\theta}(x^{(i)})) + \log(1 - D_{\theta}(G_w(x^{(i)})))$$

## 2 Intro

StyleGAN is a state of the art algorithm for image synthesis problem ...

## 3 StyleGAN

## 4 StyleGAN2

Droplet anomaly, Demodulation, No more progressive growing, perceptual path regularization,