

VAE = $\mathcal{N}(z | \mu(x), \sigma(x))$

$p(z|x)$ $p(x|z)$

$\mathcal{N}(x | f(z), c)$

$p(z|x) \sim \mathcal{N}(\bar{0}, I)$

$KL(q(z|x) || \mathcal{N}(\bar{0}, I))$

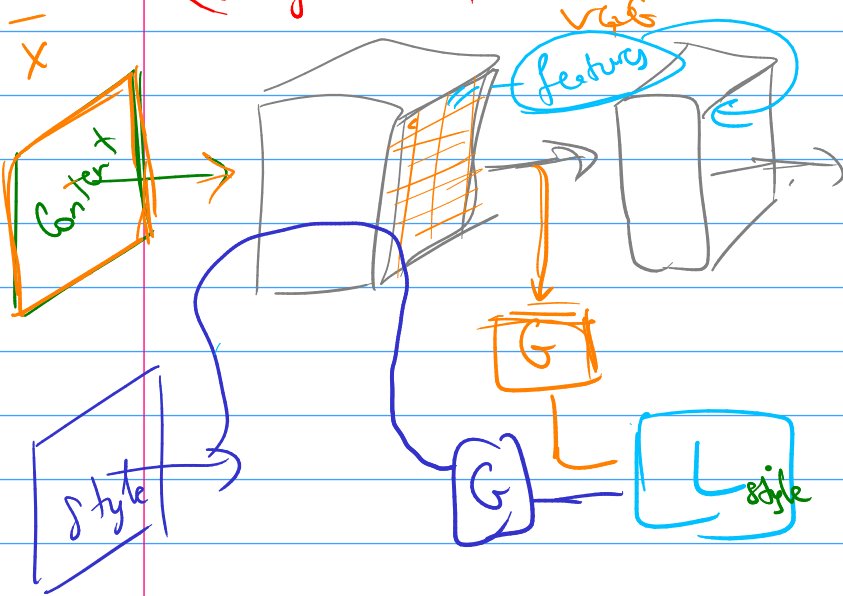
Autoregressive flows

$\bar{x} = f_k(f_{k-1}(\dots(f_2(\bar{z}))))$

$q(\bar{z}_i) = q(\bar{z}) \cdot \left| \det \frac{\partial f_i}{\partial \bar{z}} \right|$

$f_i(\bar{z}) = f_i(\bar{z}_{<i})$

AdaIN



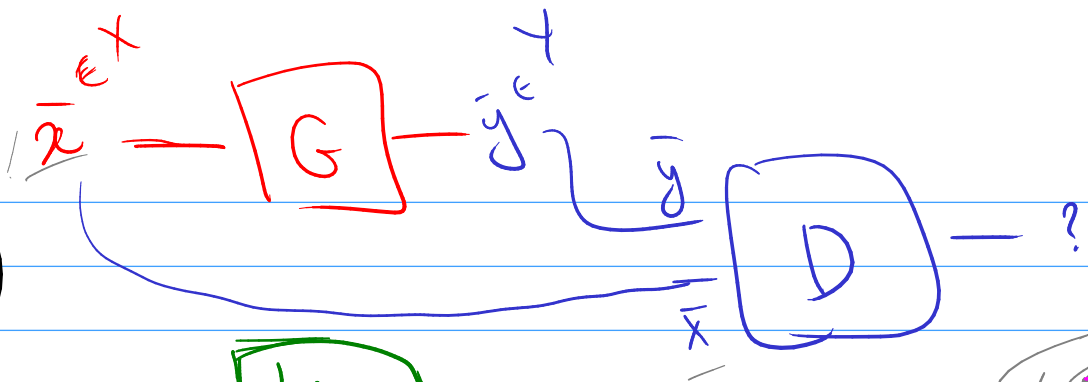
instance norm

$$IN(\bar{x}) = \bar{\gamma} \cdot \frac{x - \mu(\bar{x})}{\sigma(\bar{x})} + \bar{\beta}$$

Cond. IN - $\bar{\gamma}_s, \bar{\beta}_s$

pix2pix

(\bar{x}, \bar{y})



CycleGAN

