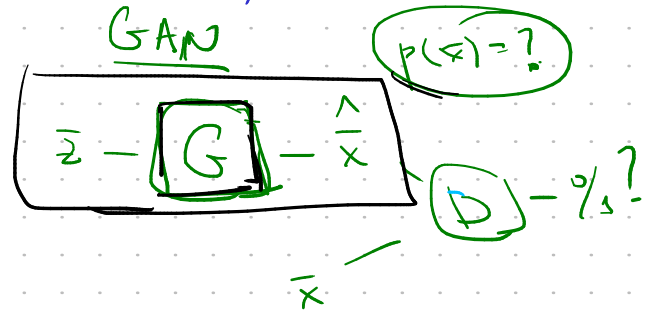


$p(\bar{x})$ Implicit density



Explicit density

Autoregressive

$$p(\bar{x}) = p(x_1) p(x_2 | x_1) \dots p(x_n | x_1, x_2, \dots, x_{n-1})$$

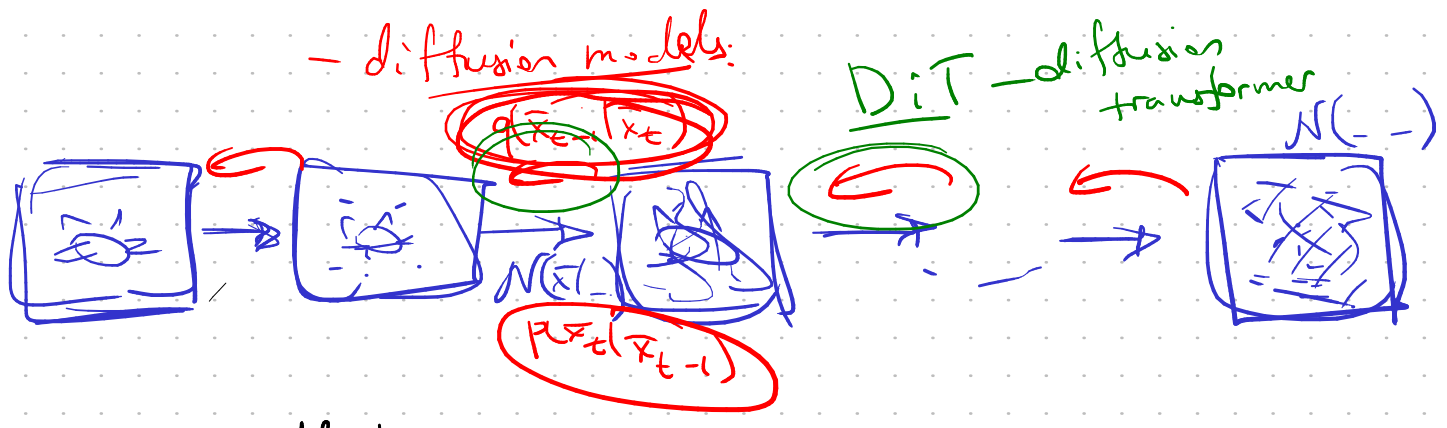
Naive Bayes:

$$p(\bar{x}, y) = p(y) \prod_{i=1}^d p(x_i | y)$$

Density transformations

$$p(\bar{x}) = (f_n \circ f_{n-1} \circ \dots \circ f_2 \circ f_1 \circ p_0)(\bar{x})$$

- flow-based models
- diffusion models:



Stable Diffusion

VAE / VQ-VAE / VQ-GAN

