

C-VAE

- Observed data is supposedly generated by an unknown function G of continuous latent variables and a condition Y

$$X = G(z, Y; \theta_g)$$

- Recognition Model approximates

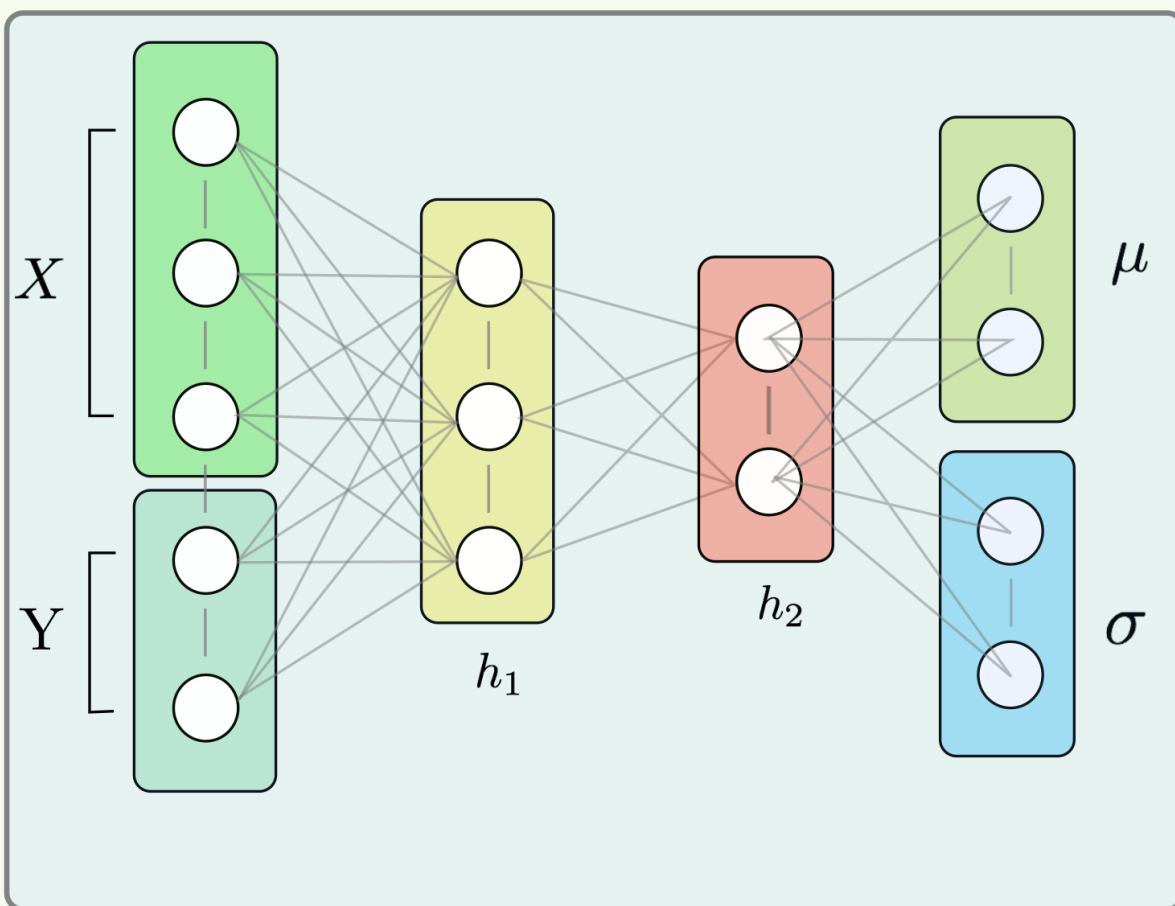
$$\mu, \sigma = Q(X, Y; \theta_e)$$

$$q(z | X) = \mathcal{N}(\mu, \sigma)$$

- C-VAE learns to model the conditional distribution of X and Y

Conditional Variational Auto Encoder

Recognition Model $Q(X, Y) = q(z|X, Y)$



Generative Model $G(z, Y) = p(X|z, Y)$

