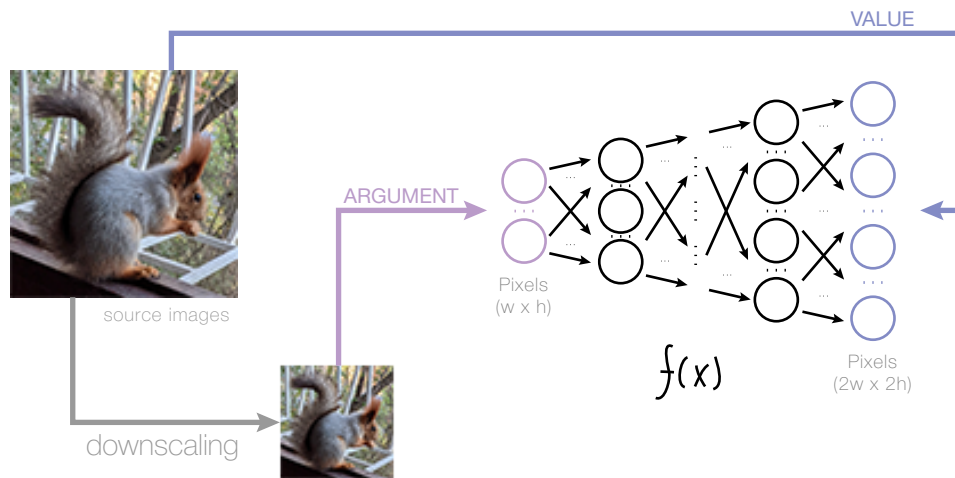
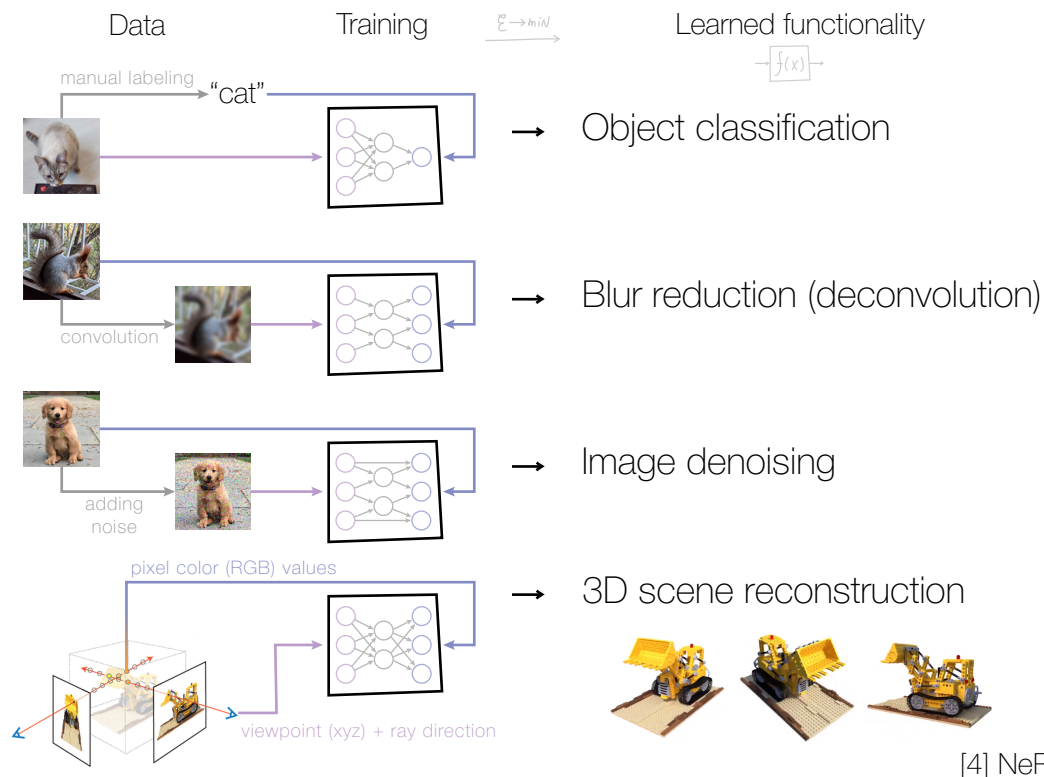
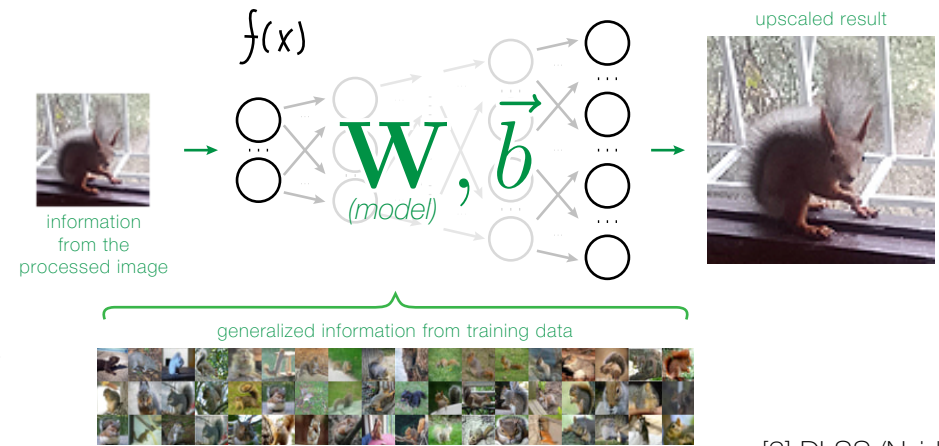


Training data sources

Training



Inference



Text generation

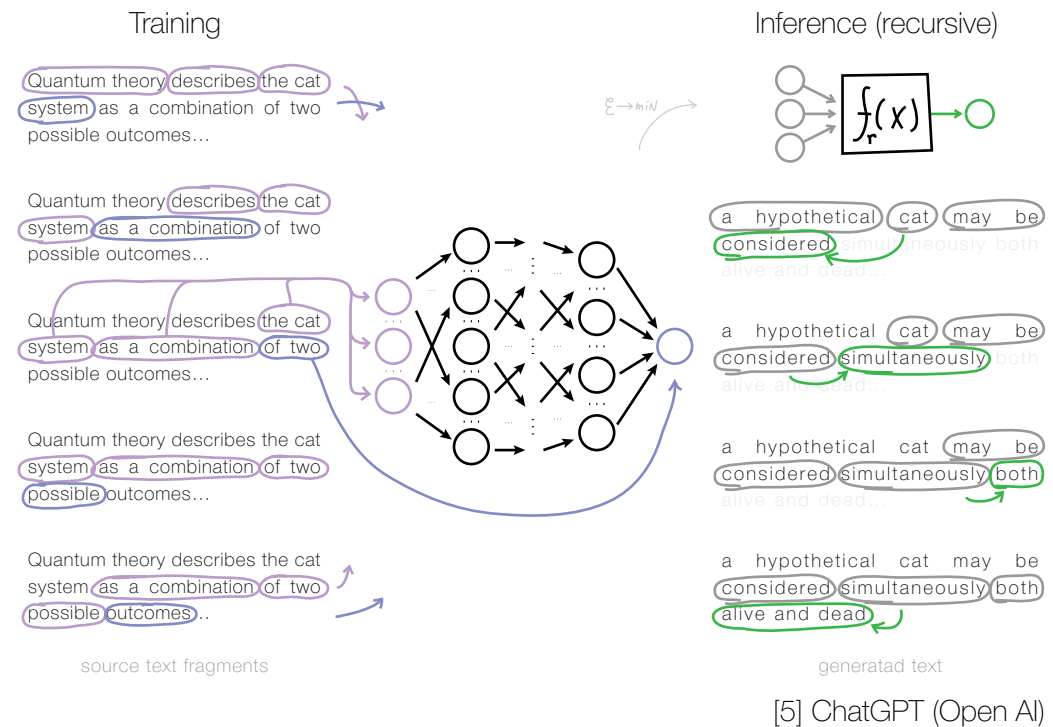
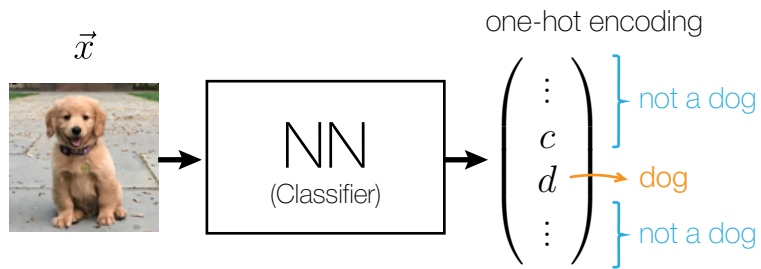


Image generation

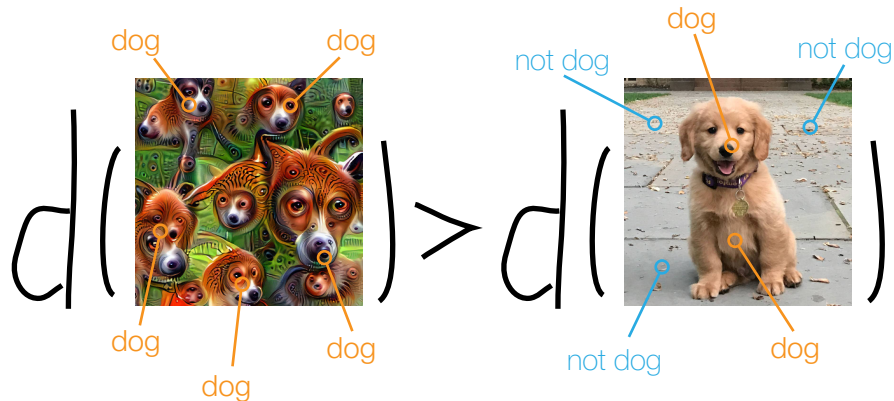


Inverted classifier

(image generation)

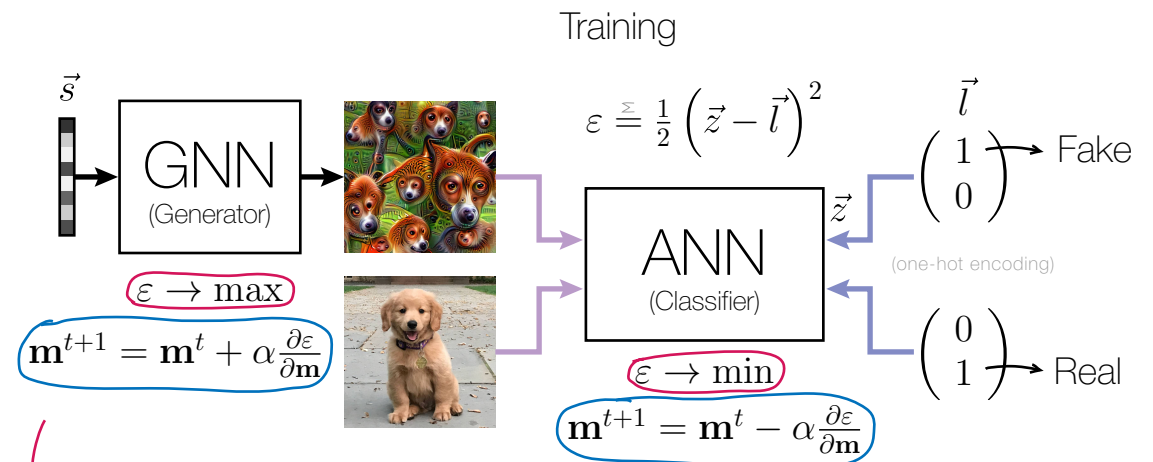
$$\vec{x} : d(\vec{x}) \rightarrow \max$$

(gradient descent in x-space)

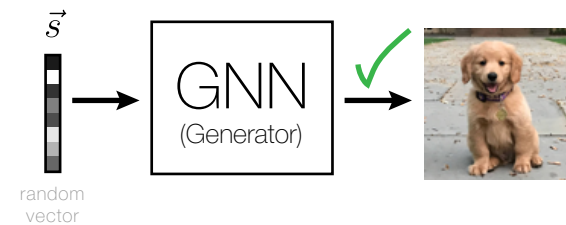


[6] Deep Dream (Google)

Generative Adversarial Network (GAN)



Inference



[7] This Person Does Not Exist

Arithmetic of Embeddings

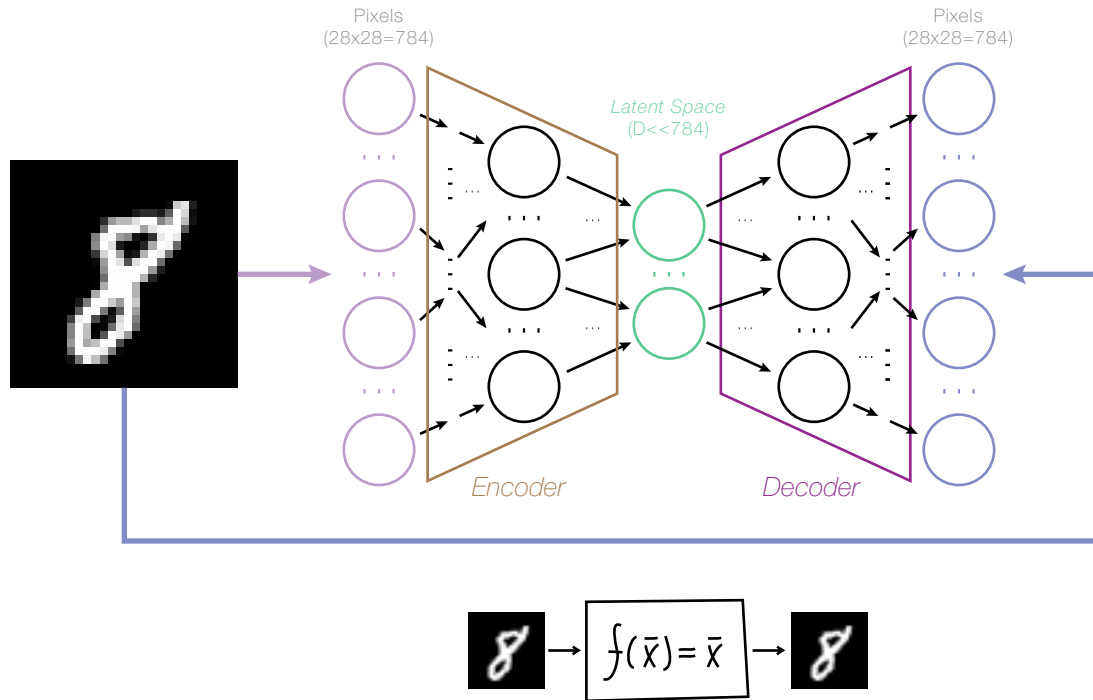
$$\vec{s}_1 - \vec{s}_2 + \vec{s}_3 = \vec{s}$$



~ [8] Word2Vec

AutoEncoder

Training



$$\xi \rightarrow \min$$

Latent encoding

(~classification)

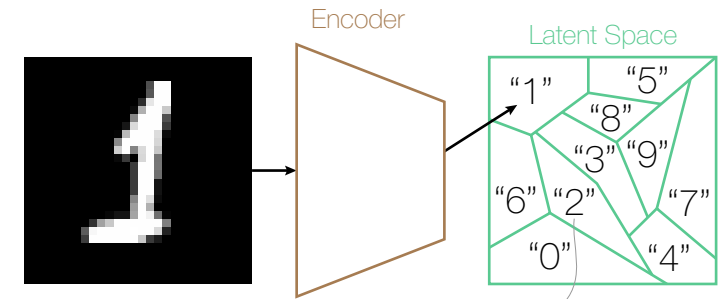
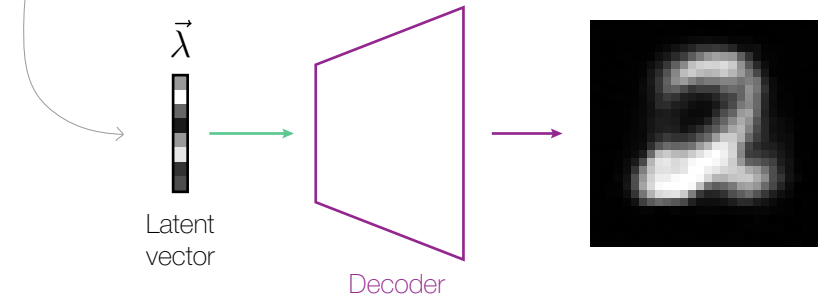
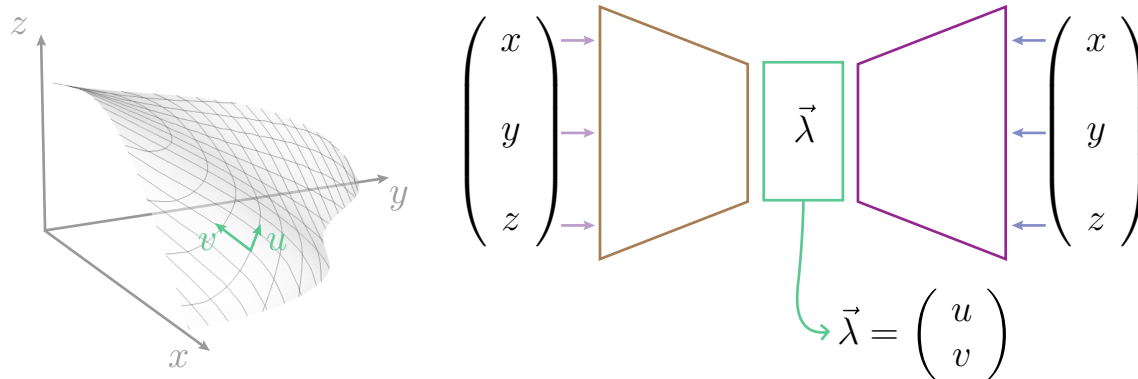


Image generation



Generalized coordinates



Variational AutoEncoder (VAE)

