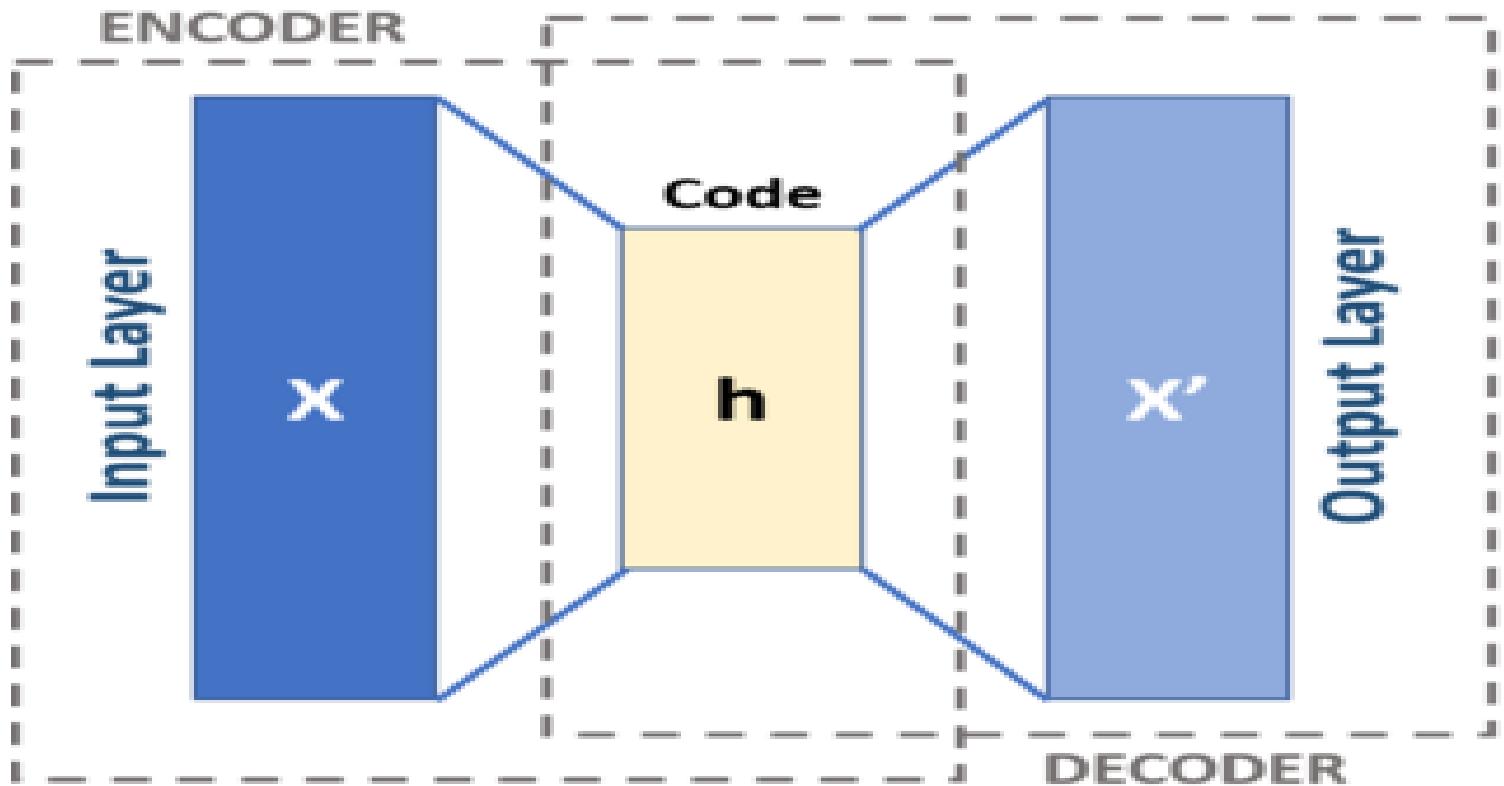
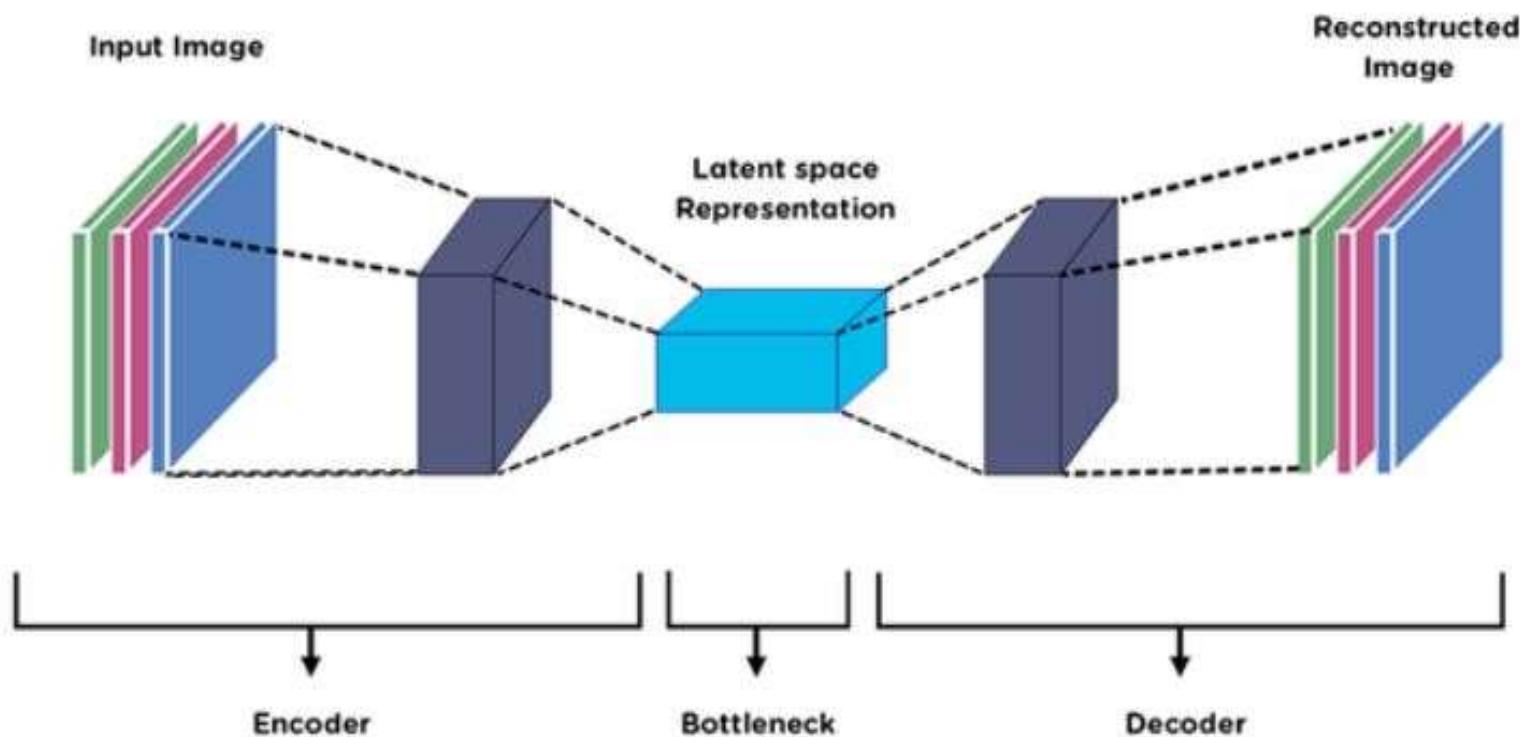


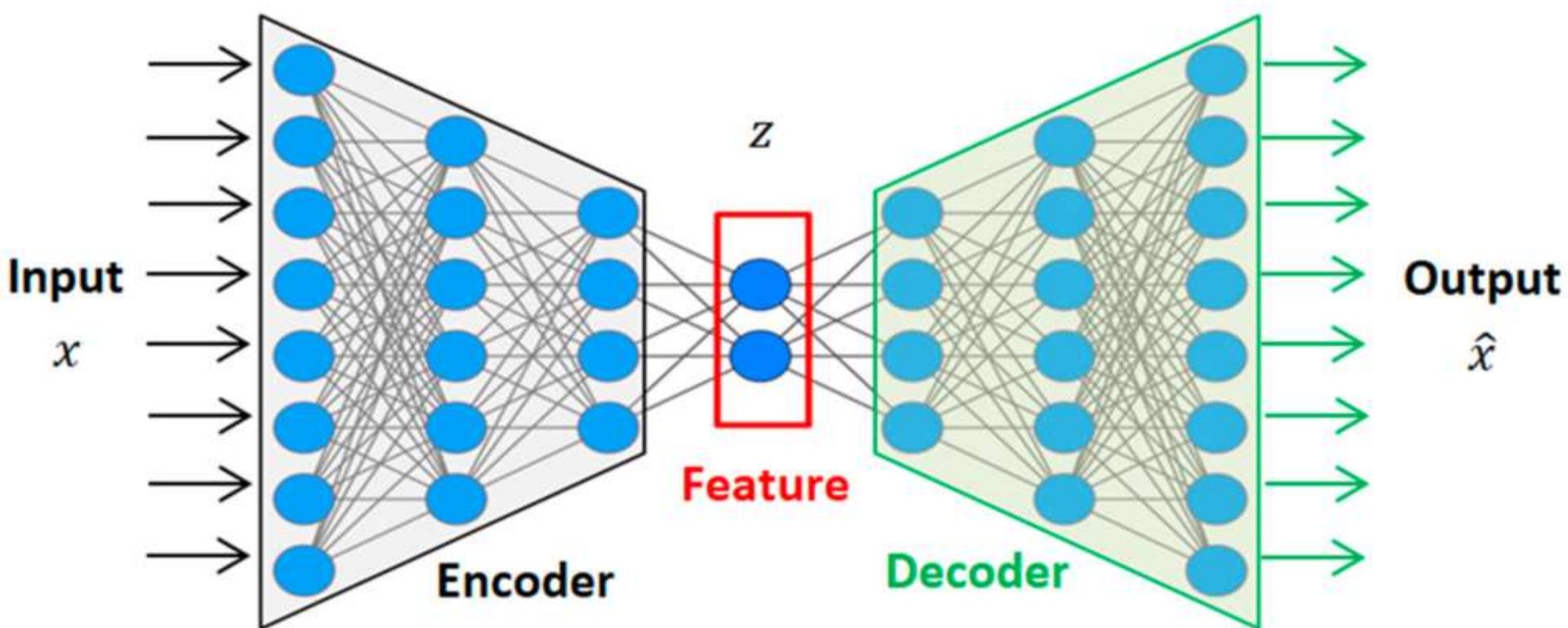
# What is an Autoencoder?



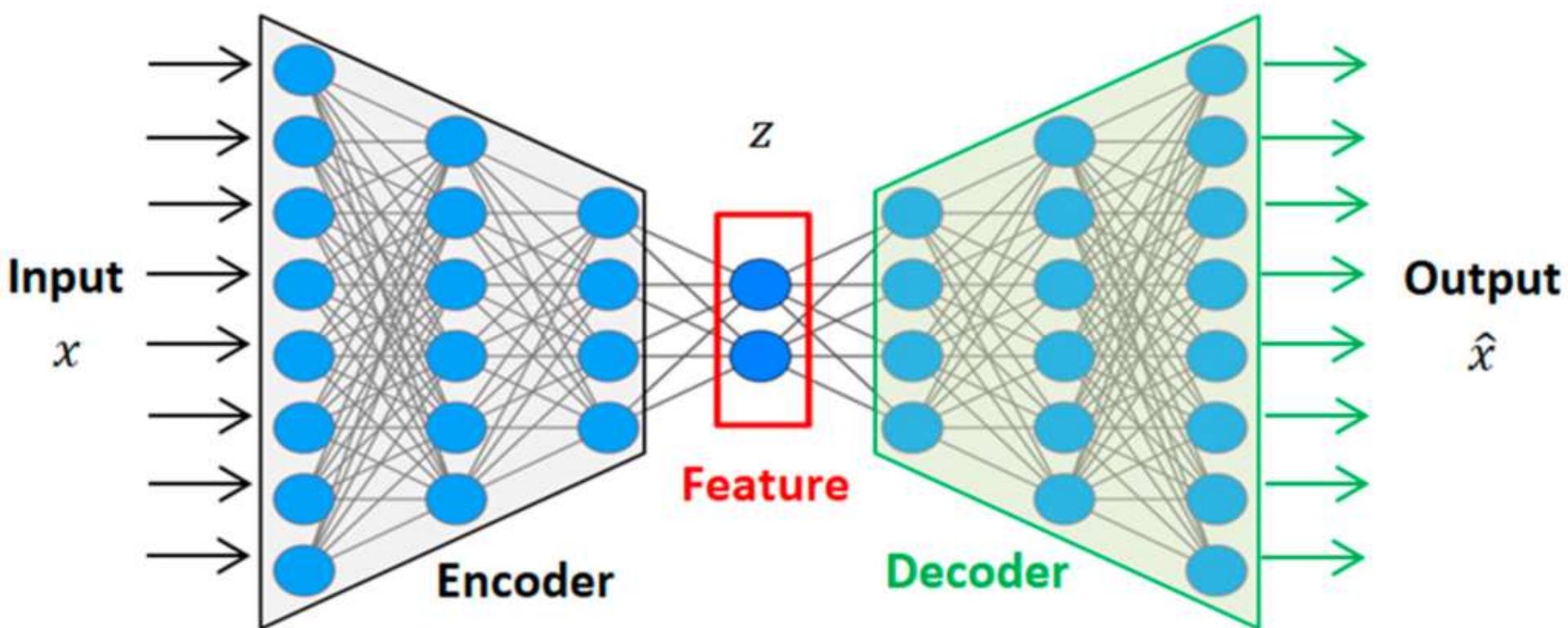
# Autoencoder Architecture



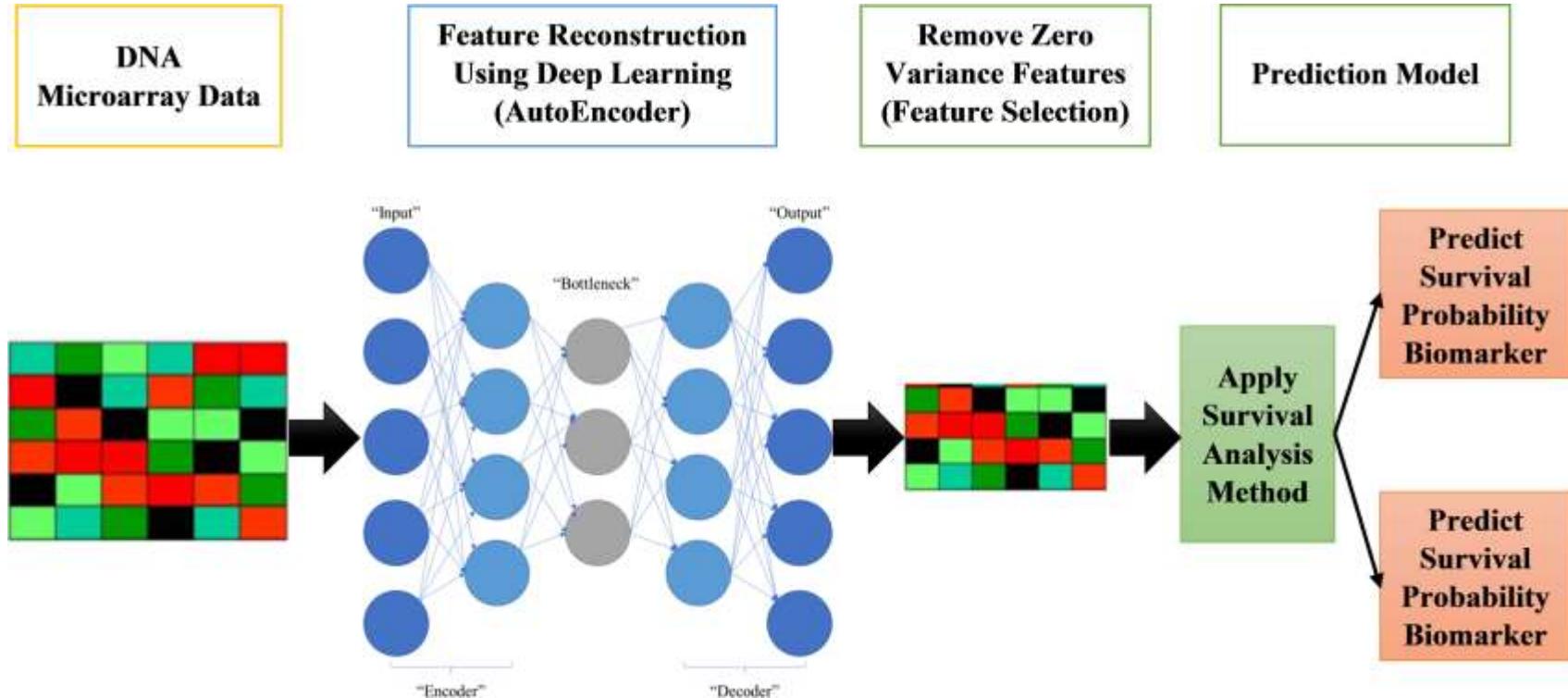
# Encoder



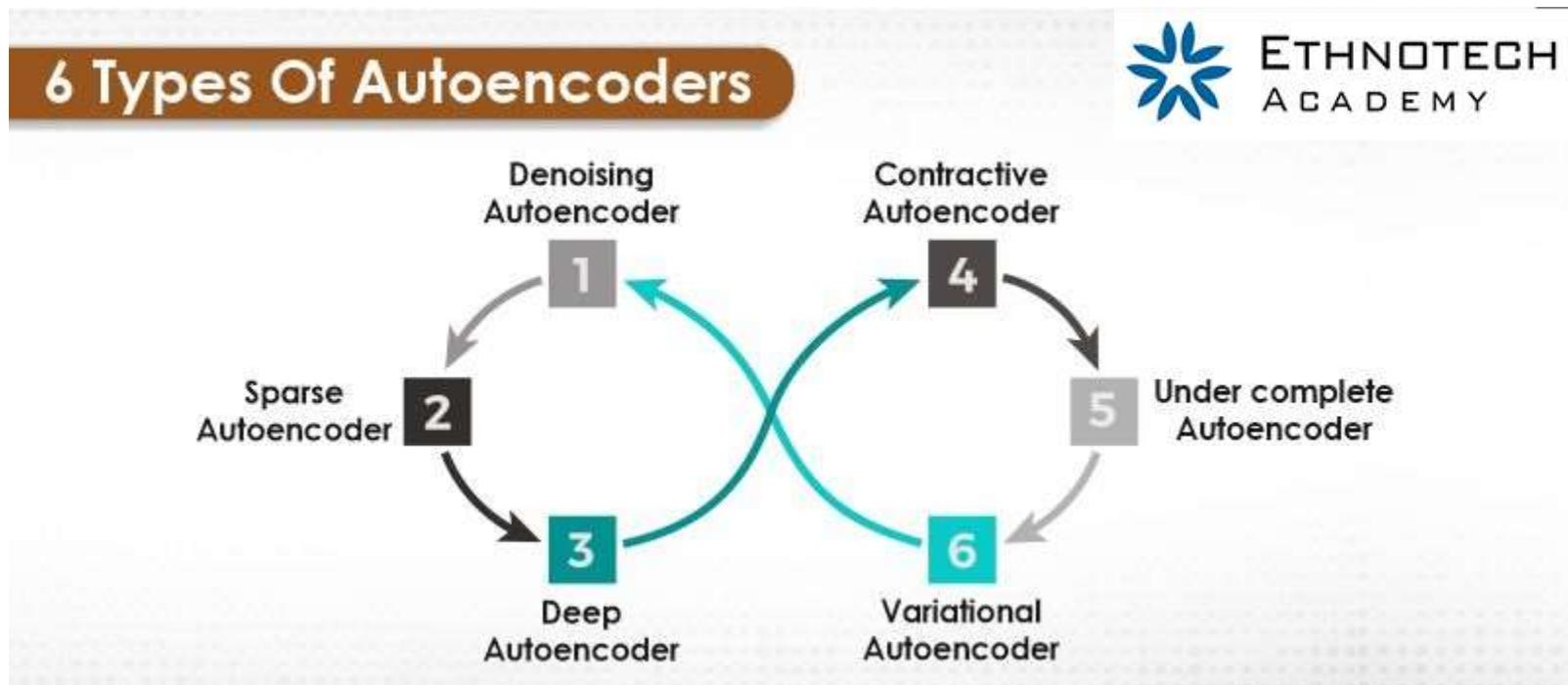
# Decoder



# Applications & training objective

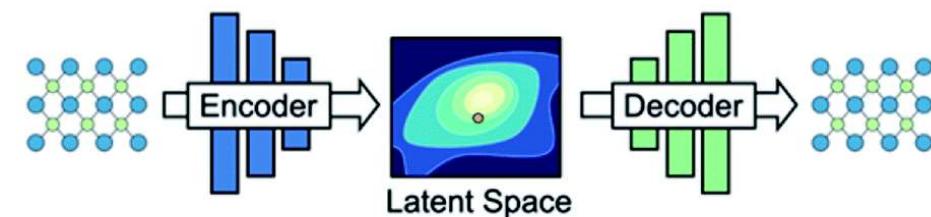


# Types of Autoencoders

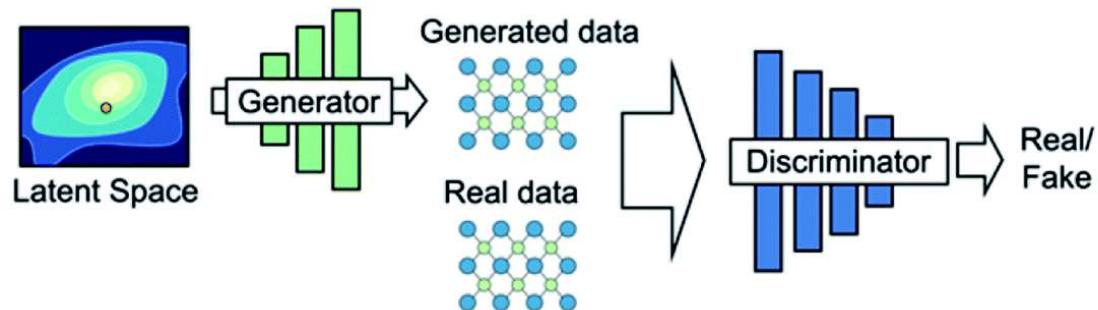


# Variational Autoencoder (VAE)

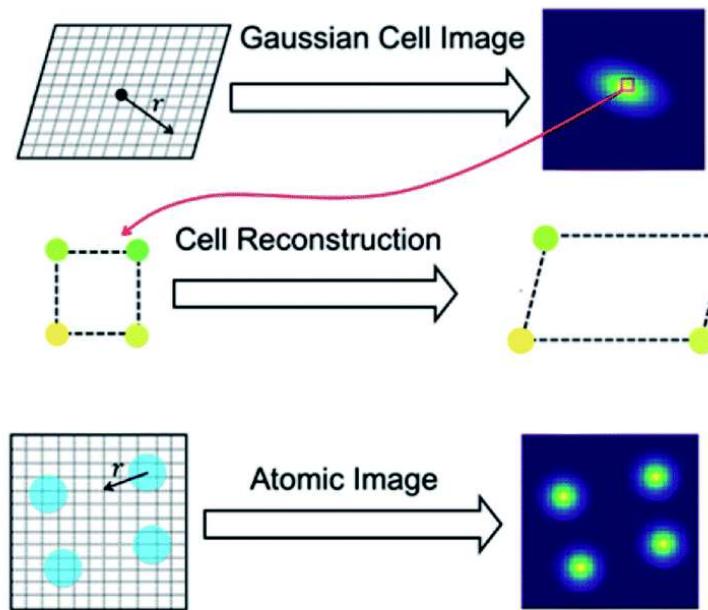
(a) Variational Autoencoder (VAE)



(b) Generative Adversarial Network (GAN)

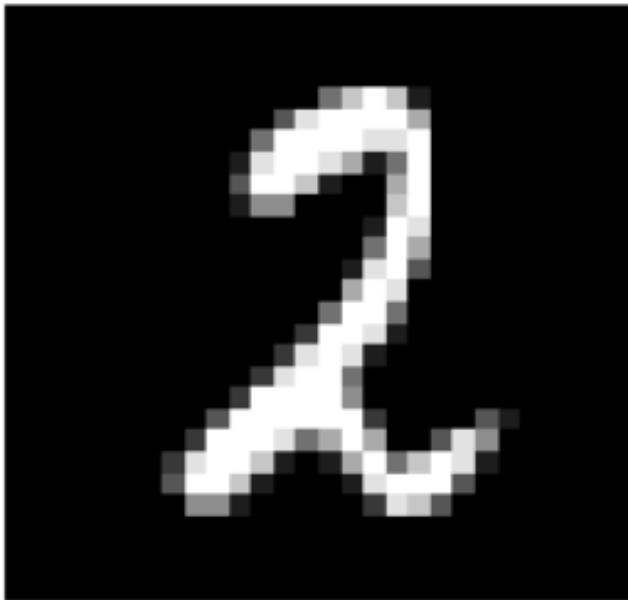


(c) 3D image representation of materials



# MNIST Reconstruction Example

Original Digit



Reconstructed Digit

