LEARNING OBJECTIVES - Lecture 4 (Variational Autoencoders I)

After attending lecture and completing the associated readings, you should be able to:

1. Discuss the basic formulations and structures of autoencoders for applications in dimensionality reduction
2. Mathematically describe why undercompleteness, contraction, and denoising might be useful ways of structuring latent spaces
3. Specify the deep latent variable model in the language of graphical models
4. Describe how graphical models can be parameterized using neural networks
5. Introduce the variational formulation of deep latent variable models