(三十) 生成模型 (学习样本分布本身) $P(X)$

监督 $\Big\{$ 判别模型 $\Big\{$ 判别 $\{P(Y|X)\}$: 逻辑回归 最大熵
生成模型

非概率模型: PLA, SVM, LDA, KNN, NN
　　　　　　 Tree Model.

非监督 $\Big\{$ 概率模型: 生成模型
非概率模型: PCA, K-means., Auto-encoder

生成模型:
Naive Bayes　假设: $P(x|y) = \prod_{i=1}^{n} P(x_i|y)$
Mixture Model: GMM
Time-series Model: HMM | KF | PF　　Kalman Particle
非参数贝叶斯模型: GP/DP

(书写概率密度或连续)

输入、形状评估型 形 $\Big\{$ Discrete vs. Continuous.
Directed model vs. Undirected
Latent Variable vs. Fully-observed.
shallow vs. Deep (深度)
Sparse vs. Dense (稠密网络)

神: $\Big\{$ parameteric vs. non-parametric
Implicit Density vs. Explicit Density
　　　GAN　　　　　　　　$P(x)$

性能: tractable vs. intractable.

学习: MLE: maximum likelihood - based
vs. likelihood - free model.