Neural Network Variants

Zeel B Patel, Nipun Batra

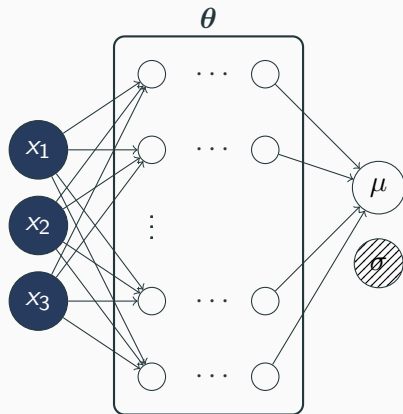September 14, 2023

IIT Gandhinagar

Symbol	Meaning
●	Input node
○	Trainable parameter
▨	Non-trainable parameter

$$p(y_i|\mathbf{x}_i, \boldsymbol{\theta}) = \mathcal{N}(y_i|\mu_i, \sigma^2)$$

Find MLE of $\boldsymbol{\theta}$ by minimizing the negative log-likelihood
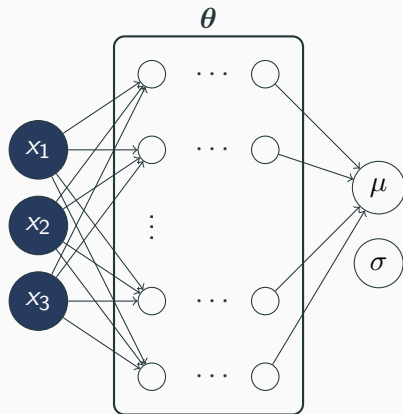
$$p(y_i|\mathbf{x}_i, \boldsymbol{\theta}) = \mathcal{N}(y_i|\mu_i, \sigma^2)$$

Find MLE of $\boldsymbol{\theta}$ and σ by minimizing the negative log-likelihood

$$p(y_i|\mathbf{x}_i, \boldsymbol{\theta}) = \mathcal{N}(y_i|\mu_i, \sigma_i^2)$$

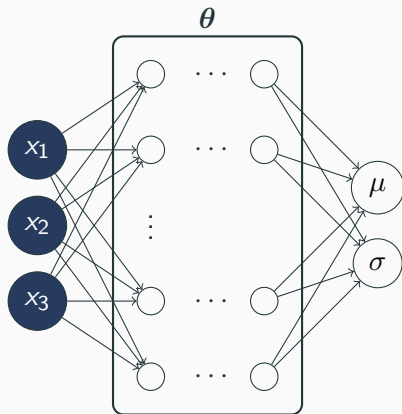Find MLE of $\boldsymbol{\theta}$ by minimizing the negative log-likelihood