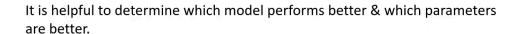
Loss Function

Loss Function

Loss function measures how far an estimated value is from its true value.





Loss =
$$\frac{1}{n} \sum_{i=1}^{n} (Y_i - \hat{Y}_i)^2$$

Types of Loss Function:

- Cross Entropy Loss
- Squared Error Loss
- KL Divergence

х	у	y ₁	y ₂	y ₃
0.30	0.35	0.38	0.39	0.41
0.45	0.48	0.45	0.47	0.56
0.50	0.55	0.59	0.58	0.63
0.55	0.63	0.65	0.69	0.70
0.66	0.72	0.75	0.78	0.78

Loss =
$$\frac{1}{n} \sum_{i=1}^{n} (Y_i - \hat{Y}_i)^2$$

$$Loss_1 = [(0.35-0.38)^2 + (0.48-0.45)^2 + (0.55-0.59)^2 + (0.63-0.65)^2 + (0.72-0.75)^2] / 5$$

$$Loss_1 = 0.173$$

Low Loss value → High Accuracy

This is squared error loss