

→ LDA is a method similar to PCA which aims to maximize the separation between two (or) more groups.

$$LD = \alpha_1 X_1 + \alpha_2 X_2$$

$$= (0.11) (CRP) + (0.70) (Temp)$$

Separation = $\frac{\text{Between group variance}}{\text{within group variance}}$

the separation ratio is similar to ANOVA statistic.

$$S = W^{-1} B$$

B = Between group covariance matrix

S = target matrix

W = Pooled within group covariance matrix

