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E8: General view of Dimensionality Reduction, Curvilinear component analysis (CCA)

The cost function if CCA is:

$$\sigma r = \sum_{i<j} (d(xi, xj) - d(yi, yj))^2 F(d(yi, yj), \lambda y)$$

The error function is same as of Multidimensional scaling i.e. the sum of the square of the distance between low dimensional and high dimensional distances. Only distances are considered in CCA whereas all distances are considered in multidimensional scaling.