CSE 472 Report Submission

Dimensionality Reduction using Principal Component Analysis and Clustering using Expectation-maximization Algorithm

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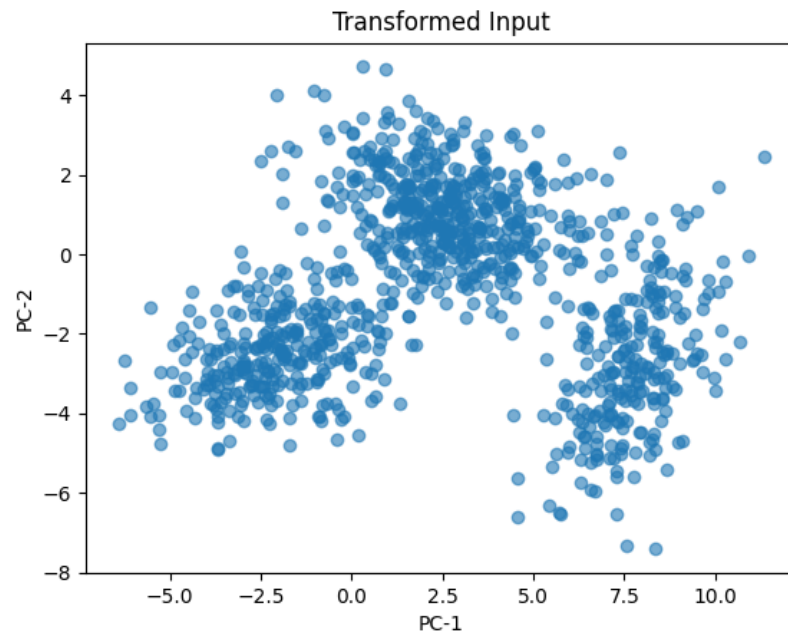
1 Principle Component Analysis Plot

Figure 1: PCA Plot

2 Parameter values for Expectation Maximization Algorithm

K (Cluster Index)	Mean	Co-variance Matrix	Weight
1	[7.72, 2.82]	[[1.42, -1.02], [-1.04, 3.13]]	0.24
2	[-2.04, 2.48]	[[2.85, -0.59], [-0.59, 1.12]]	0.30
3	[2.66, -1.07]	[3.12, 0.67], [0.67, 1.36]]	0.46

Table 1: Parameter values for EM Algorithm