

Data Representation Report

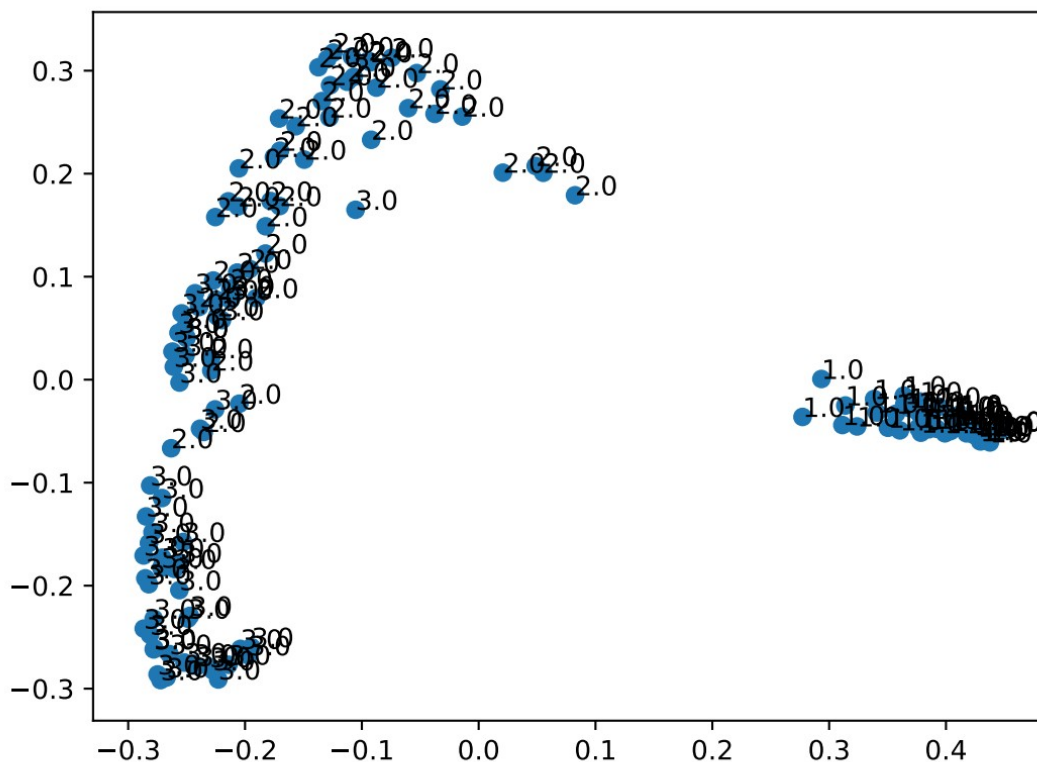
Name: Rishita Bansal

Netid: rxb180044

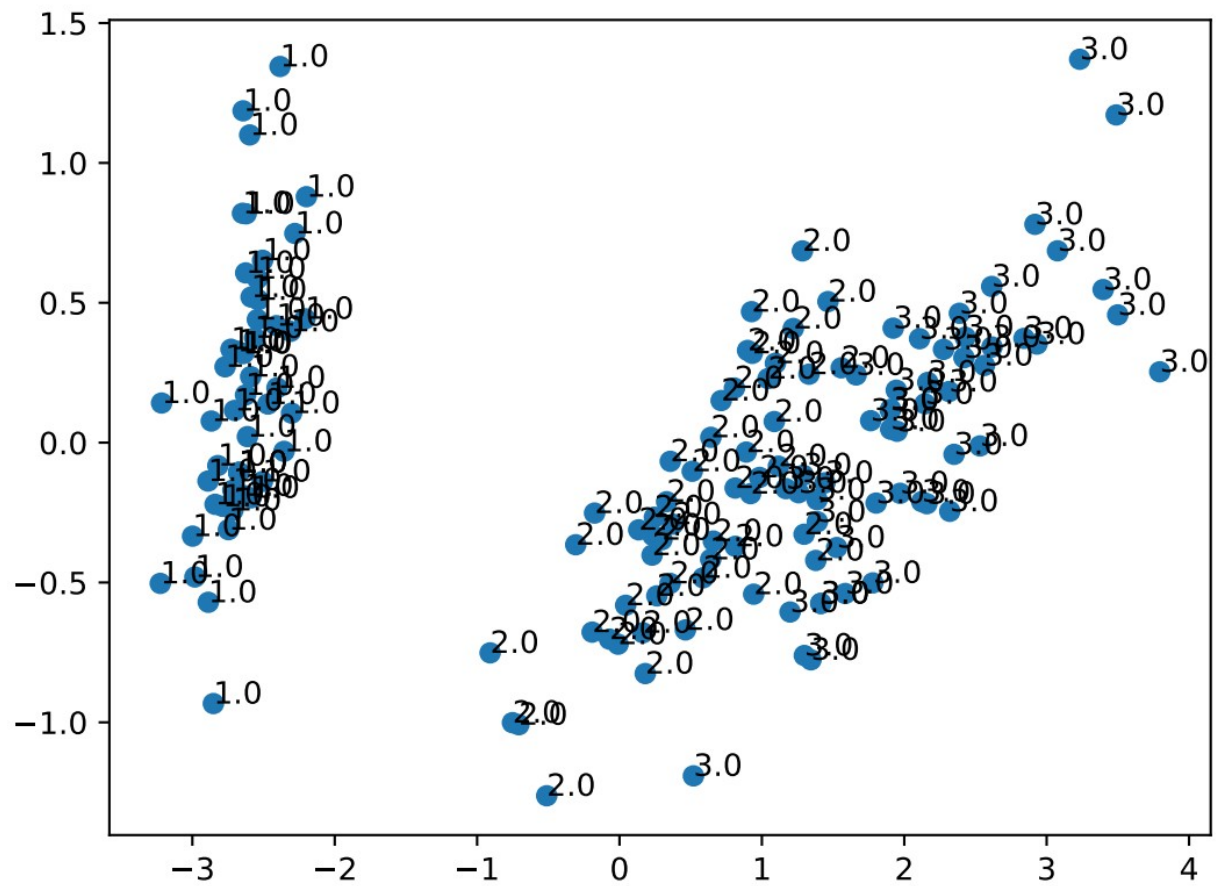
Observations for MDS:

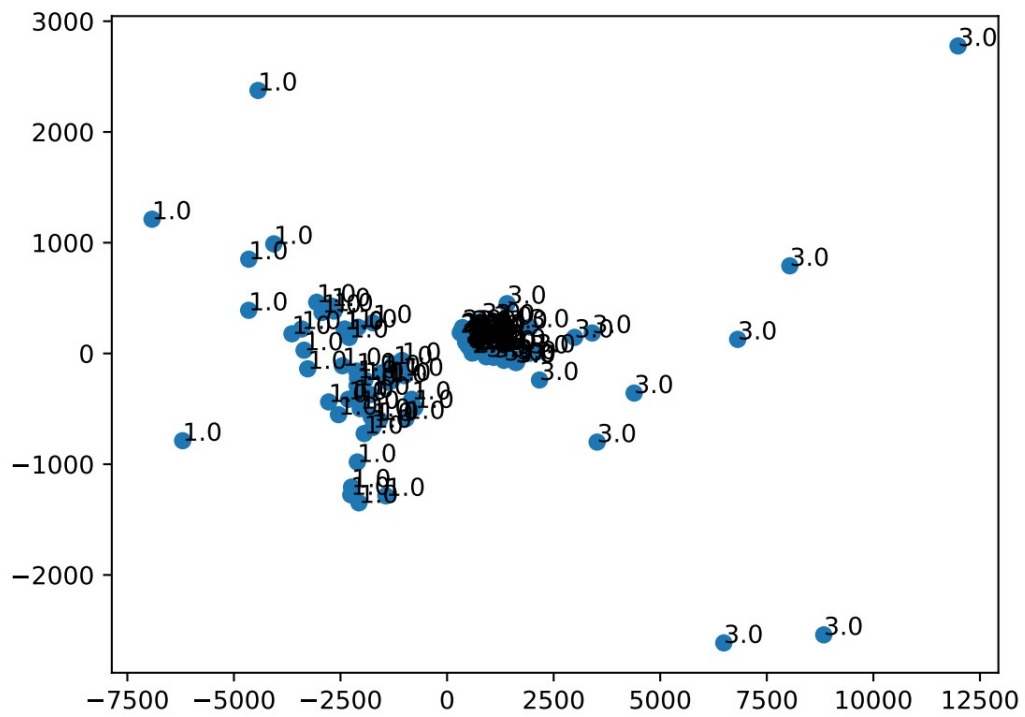
As we decrease the alpha the distance between clusters increase and distance between the points in a cluster decrease. So having a sufficiently big alpha can help us get a good clustering. Bigger alpha helps mis-classification of points that are falling into the wrong cluster.

We can see this very clearly in the iris dataset:



MDS with alpha= 0.1





MDS with $\alpha = 5$