**EE 527: Machine Learning Laboratory**

**Assignment 6**

Due date: 21 March 2023

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**1.** **PCA & KD Tree**

Consider

**2. Spherical Clustering**

Consider the YALE face dataset, which consists of 15 subjects of 11 faces each. Scale down the images by a scaling factor of 0.5 along both height and width axes. Flatten the images into vectors . Perform spherical clustering by choosing an appropriate cluster number **K** and visualize the mean face of the each of the clusters at convergence.