TINONS1 EXERCISES WEEK 2

Exercise 1 :

Experiment with Principal Components Analysis (PCA) on the written digits dataset.

Try to re-construct (“decompress”) the digit with different number of eigenvectors/components.

Plot the digits “2” and “3” in a 2D space, formed by projecting the vectors onto the two principal components from one of the digits.

Exercise 2 :

Apply PCA to your own case. Plot the eigenvalue spectrum. How many components are needed to account for e.g. 90% of the variance ?

Project your data onto two or three principal eigenvectors and plot the result - are your classes clearly separated ?