

MLNN Laboratory Session

30 November 2022

Problem 1

You are given a dataset with a number of points in a 2D space. The data is stored in the `problem1data.csv` file, with the first and second columns denoting X and Y coordinates of each entry point. Inspect the data visually, identify the number of clusters, and label each data point using the k-means testing algorithm.

Problem 2

You are given a high-resolution image of a large sunspot observed by National Solar Observatory (NSO) (`sunspot.jpg`). Use k-mean testing algorithm to select the sunspot on the image, and evaluate the area of the sunspot. Assume that each pixel corresponds to a 100kmx100km square on the solar surface.