

Assignment 3 Report

Students: skn003, tre081

How to run:

1. Run jupyter
2. Open "Assignment3_skn003_tre081.ipynb" in jupyter
3. Run the file

How did the clustering algorithms perform comparatively?

The algorithms produced very similar results which you can see if you compare figure 1 with figure 2, and figure 3 with figure 4. The main differences being how the various nodes are being grouped.

How many clusters did we get?

We got approximately 5 clusters on both tries with both algorithms when running based on both versions of the dataset.

Visualisations:

(note: all visualisations are from the Engelsberger_short dataset)

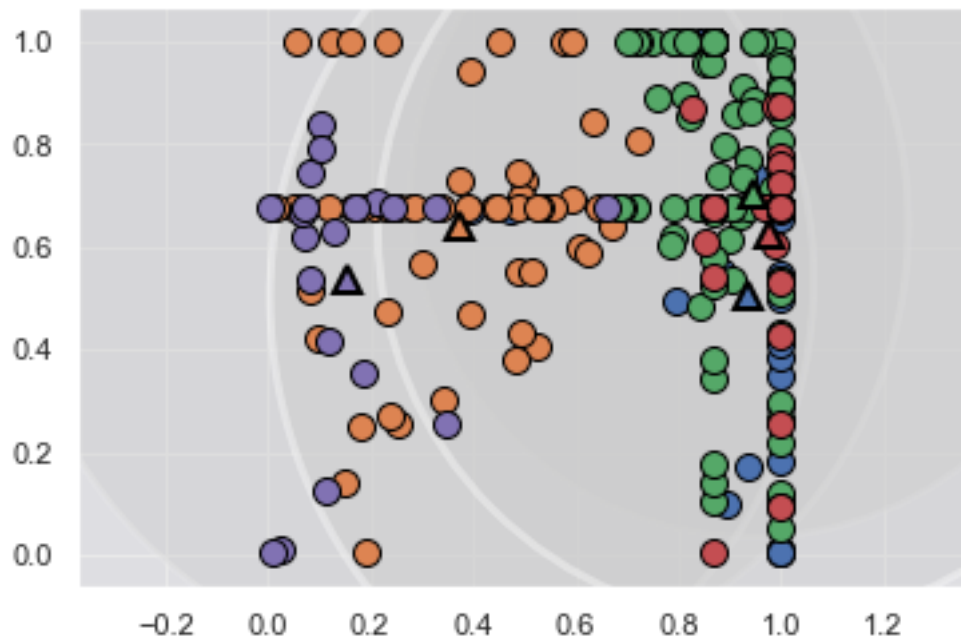


Figure 1: `kmeans(data.iloc[:, 0:5].values)`

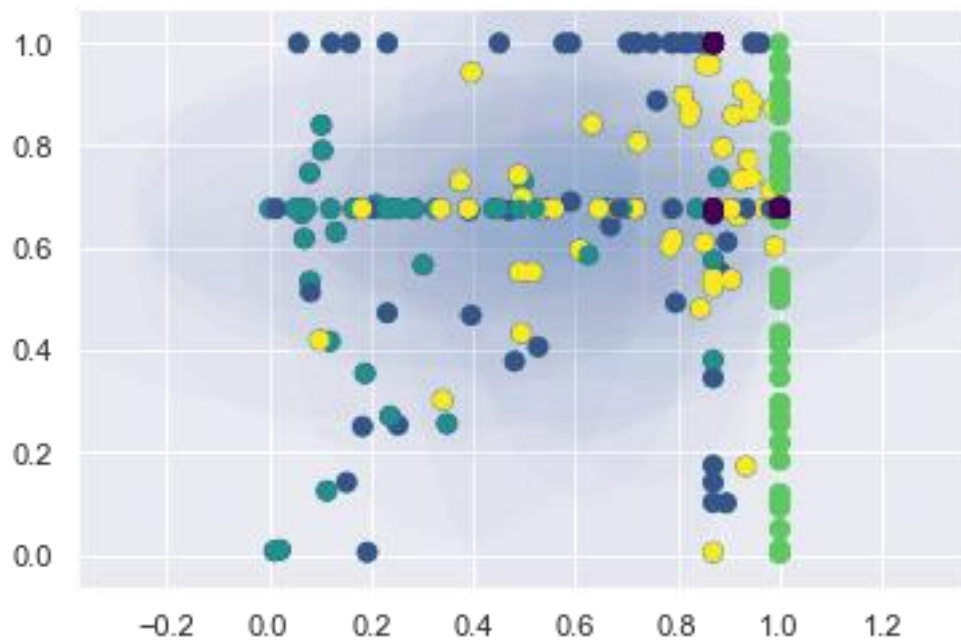


Figure 2: `gaussian_mixture(data.iloc[:, 0:5].values)`

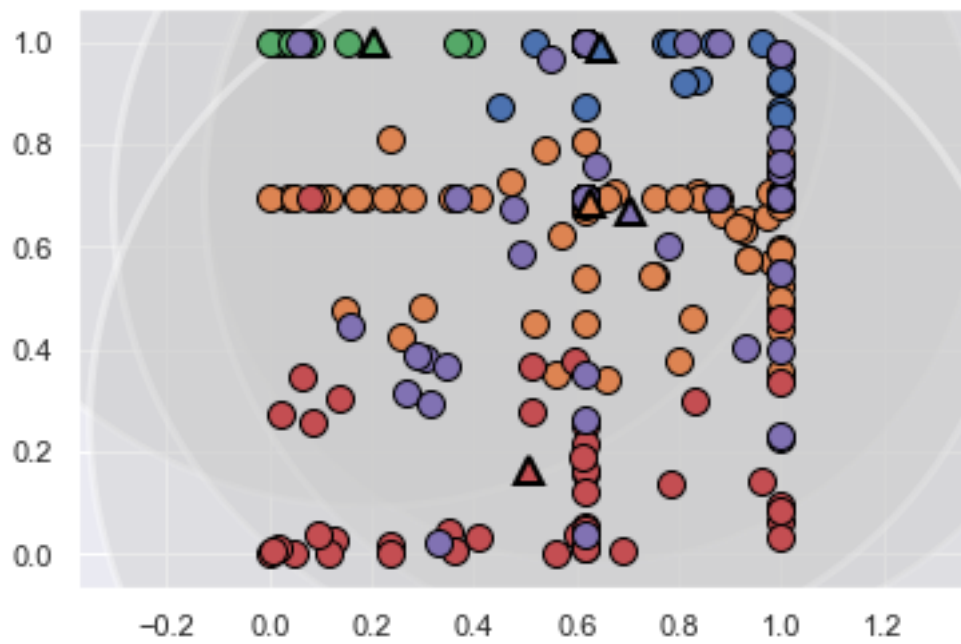


Figure 3: `kmeans(data.iloc[:, :-1].values)`

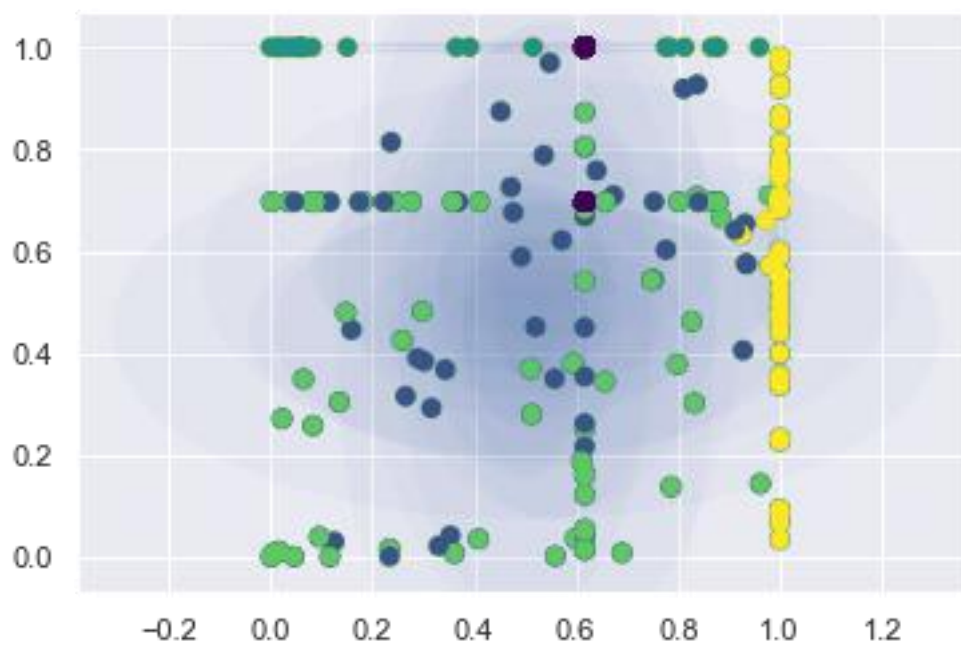


Figure 4: `gaussian_mixture(data.iloc[:, :-1].values)`