## **Abstract**

Clustering is one of the difficult problems that always arise when processing data. This is because the information contained in the data is very small.

To ilustrate the problems of clustering, a datasets have been created by a German researcher, Alfred Ultch, in form Fundamental Clustering Problem Suite (FCPS). FCPS consist of ten dataset that represent certain problems such as differences in data density, variance and distance between clusters.

In this final project, I will benchmark performance Neural Gas Network to solve FCPS. The performance is presented with an accuracy that calculated through confusion matrix table. From the research, Neural Gas Network obtained accuracy 100% when completing 9 of 10 datasets. While the rest reached 96.78%.

**Keywords**: clustering, Fundamental Clustering Problem Suite, Neural Gas Network