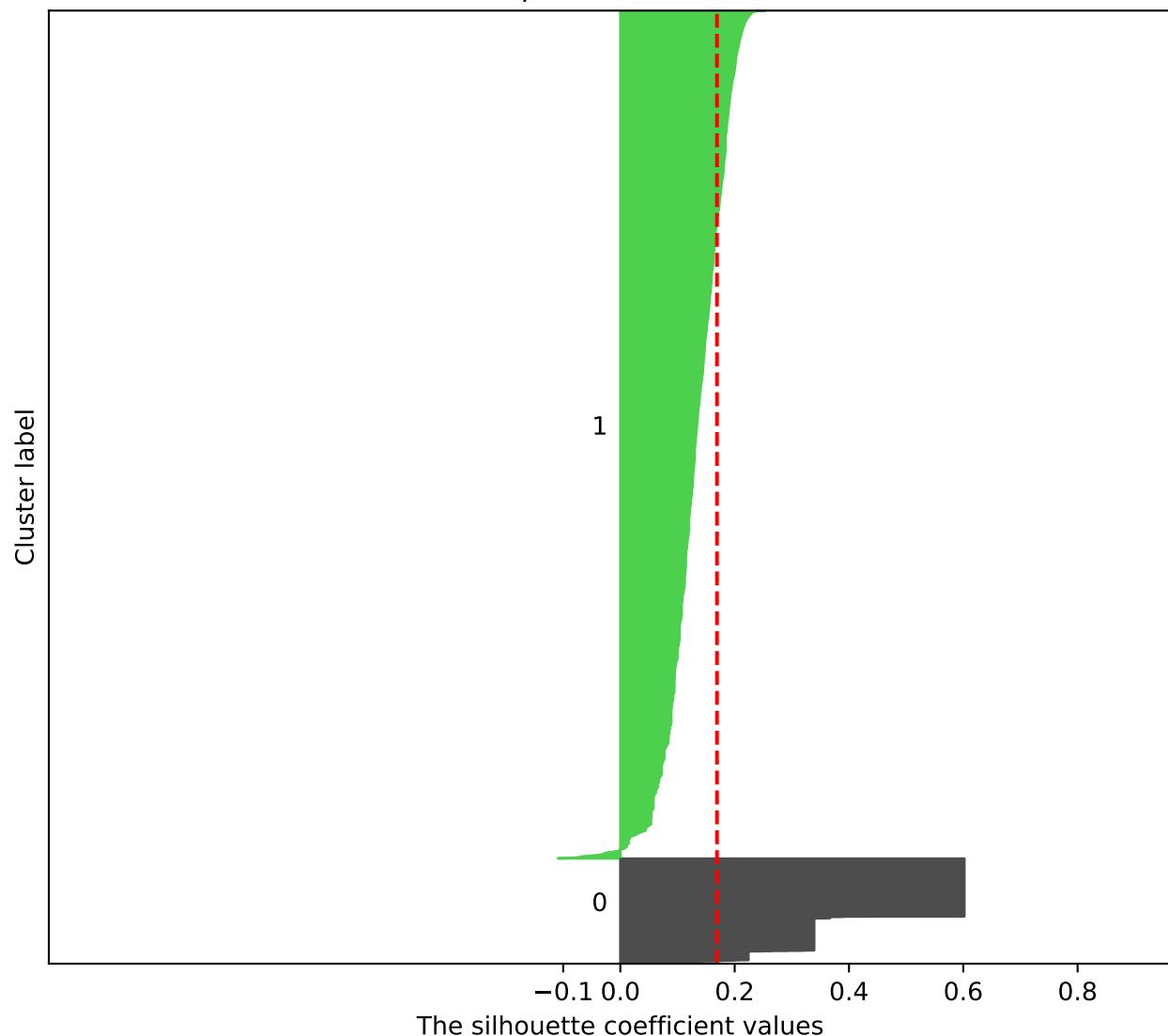
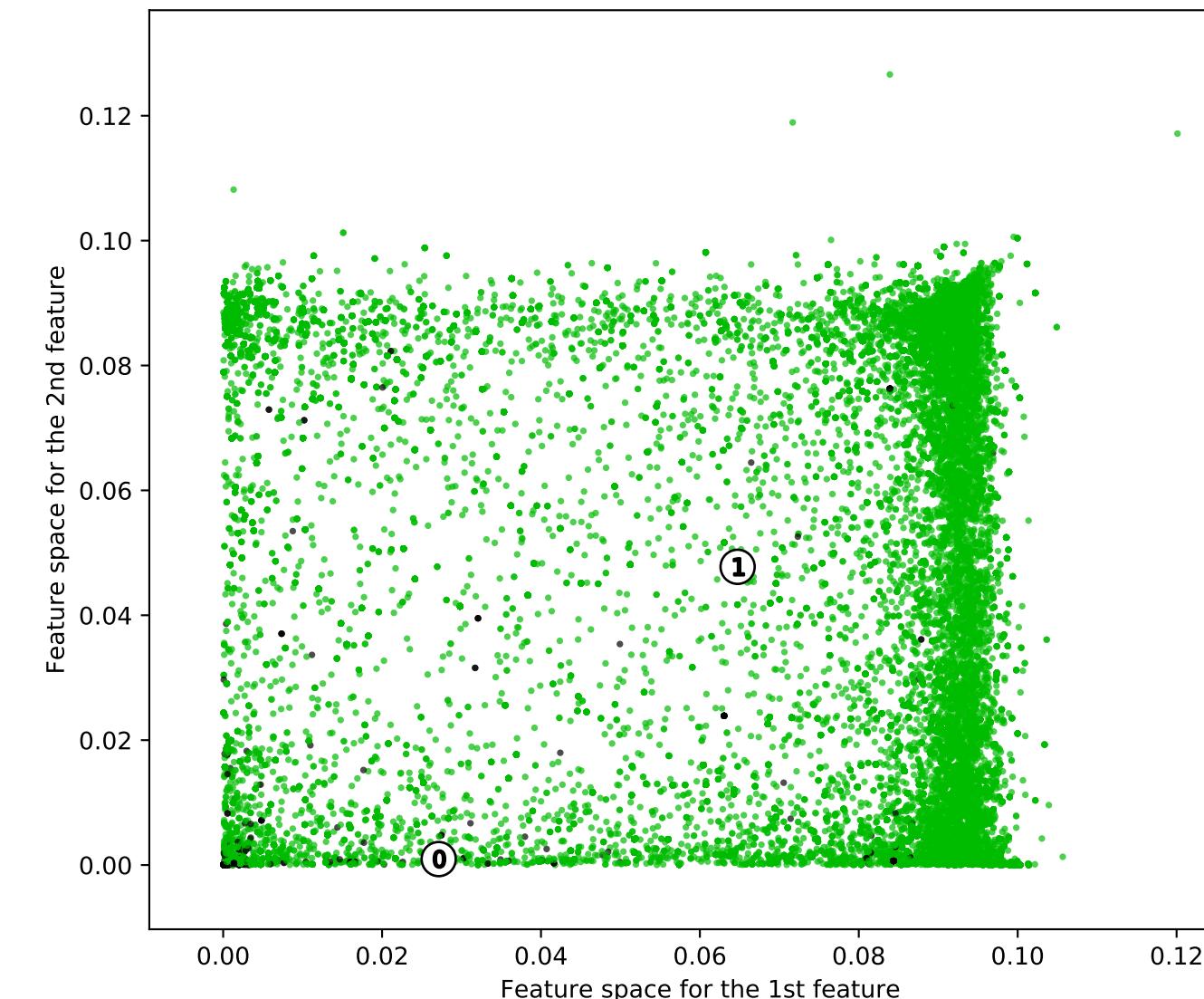


Silhouette analysis for KMeans clustering on sample data with n_clusters = 2 with Average Silhouette of: 0.16906967759132385

The silhouette plot for the various clusters.

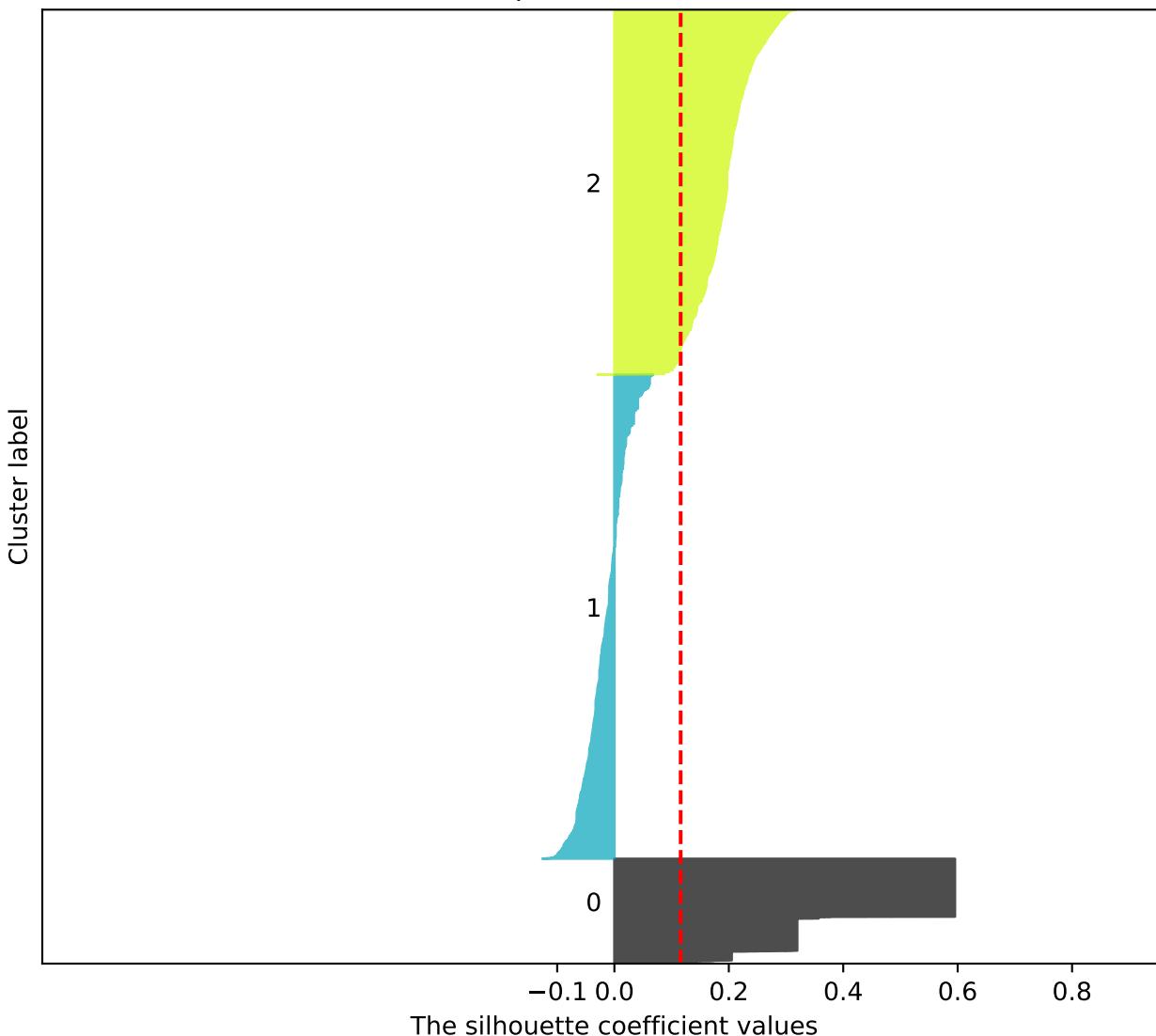


The visualization of the clustered data.

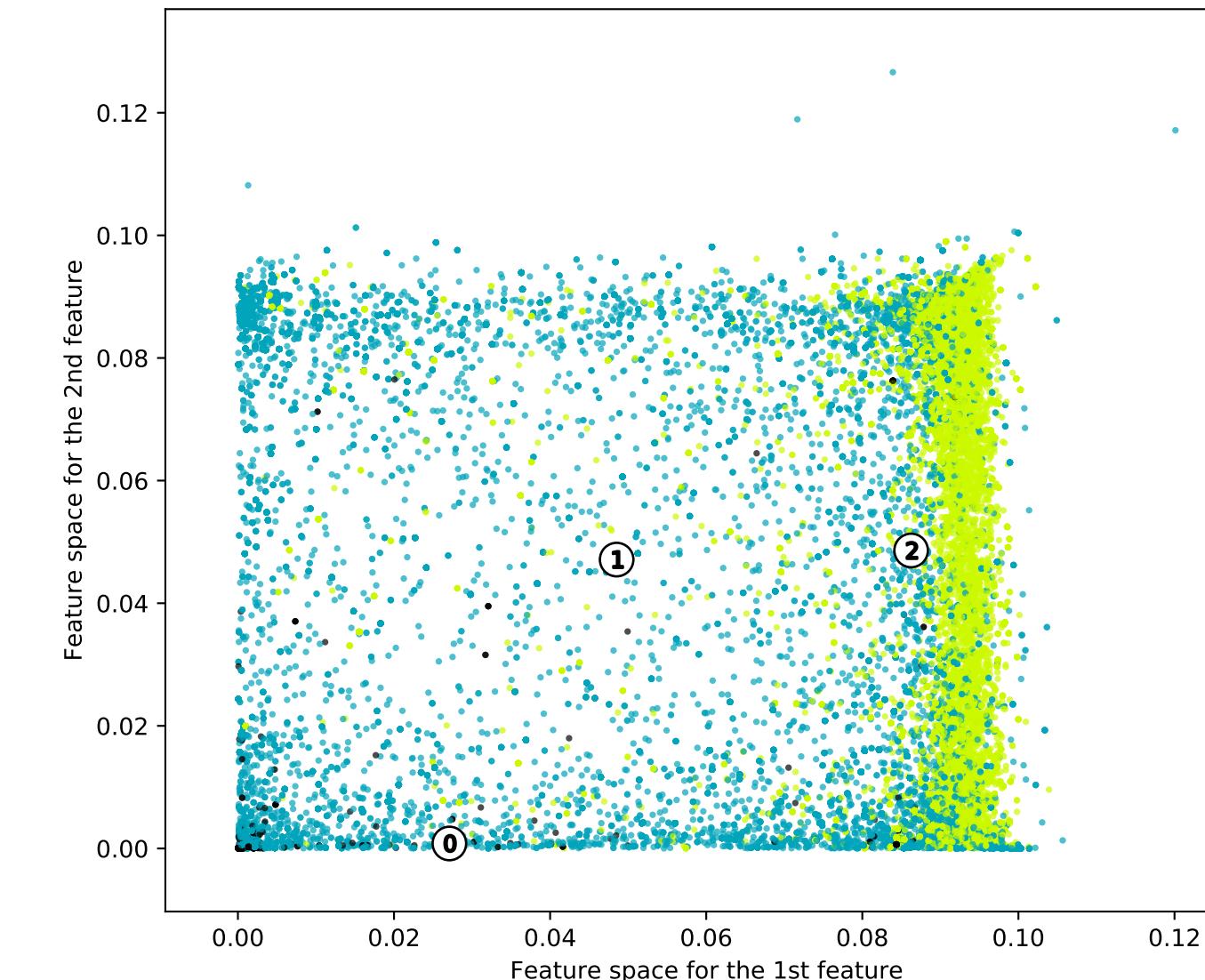


Silhouette analysis for KMeans clustering on sample data with n_clusters = 3 with Average Silhouette of: 0.11585099250078201

The silhouette plot for the various clusters.

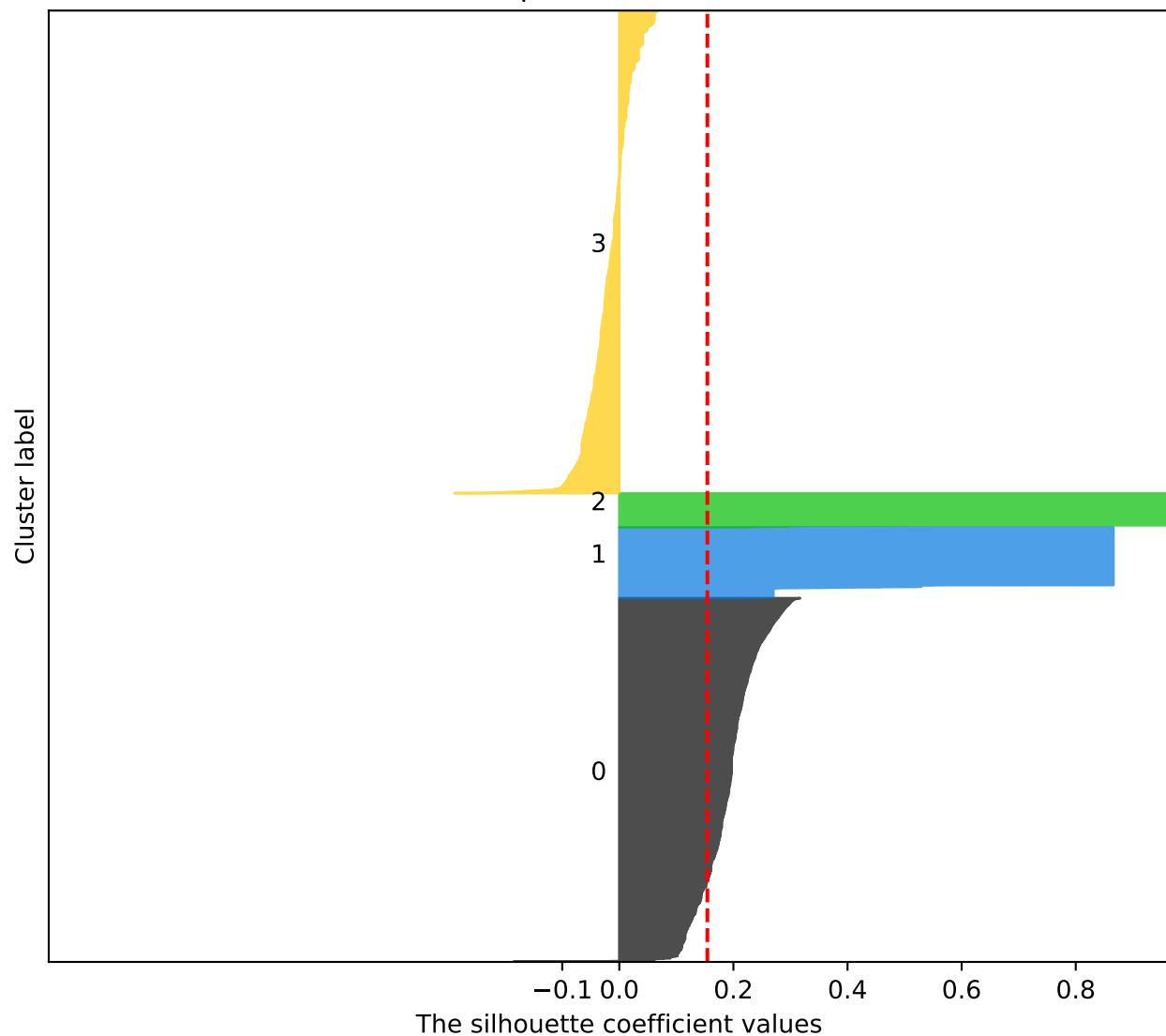


The visualization of the clustered data.

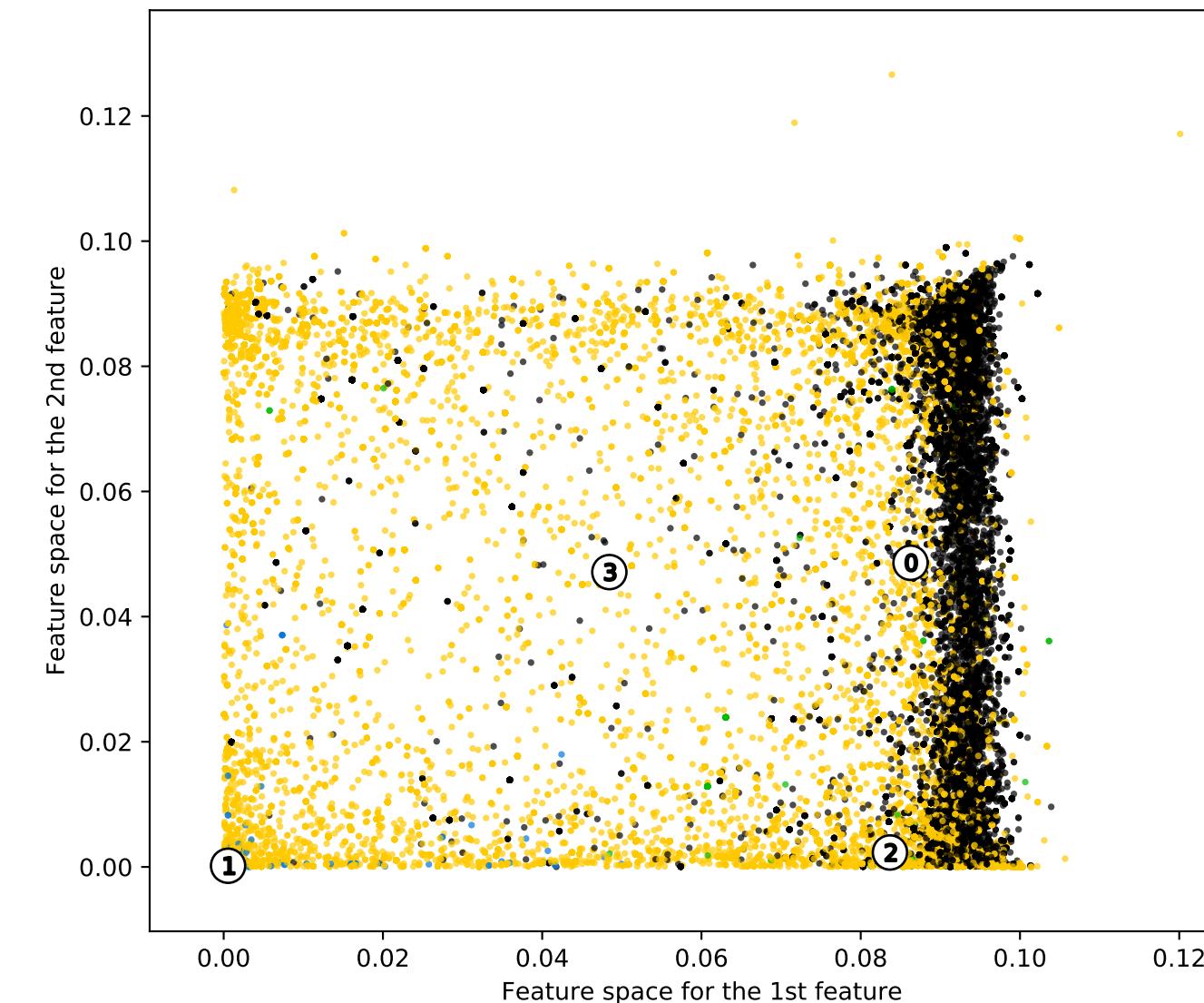


Silhouette analysis for KMeans clustering on sample data with n_clusters = 4 with Average Silhouette of: 0.15440139174461365

The silhouette plot for the various clusters.

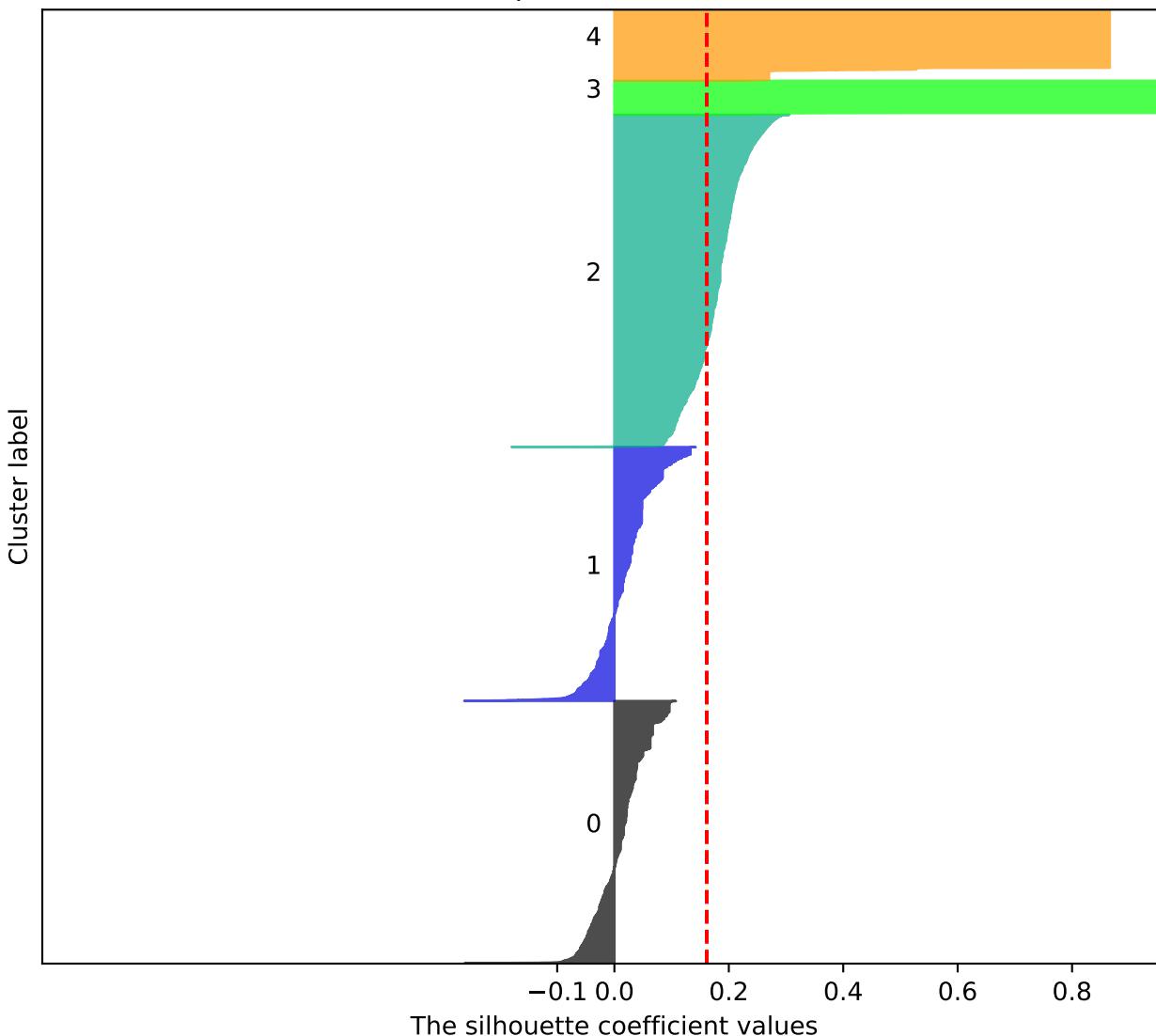


The visualization of the clustered data.

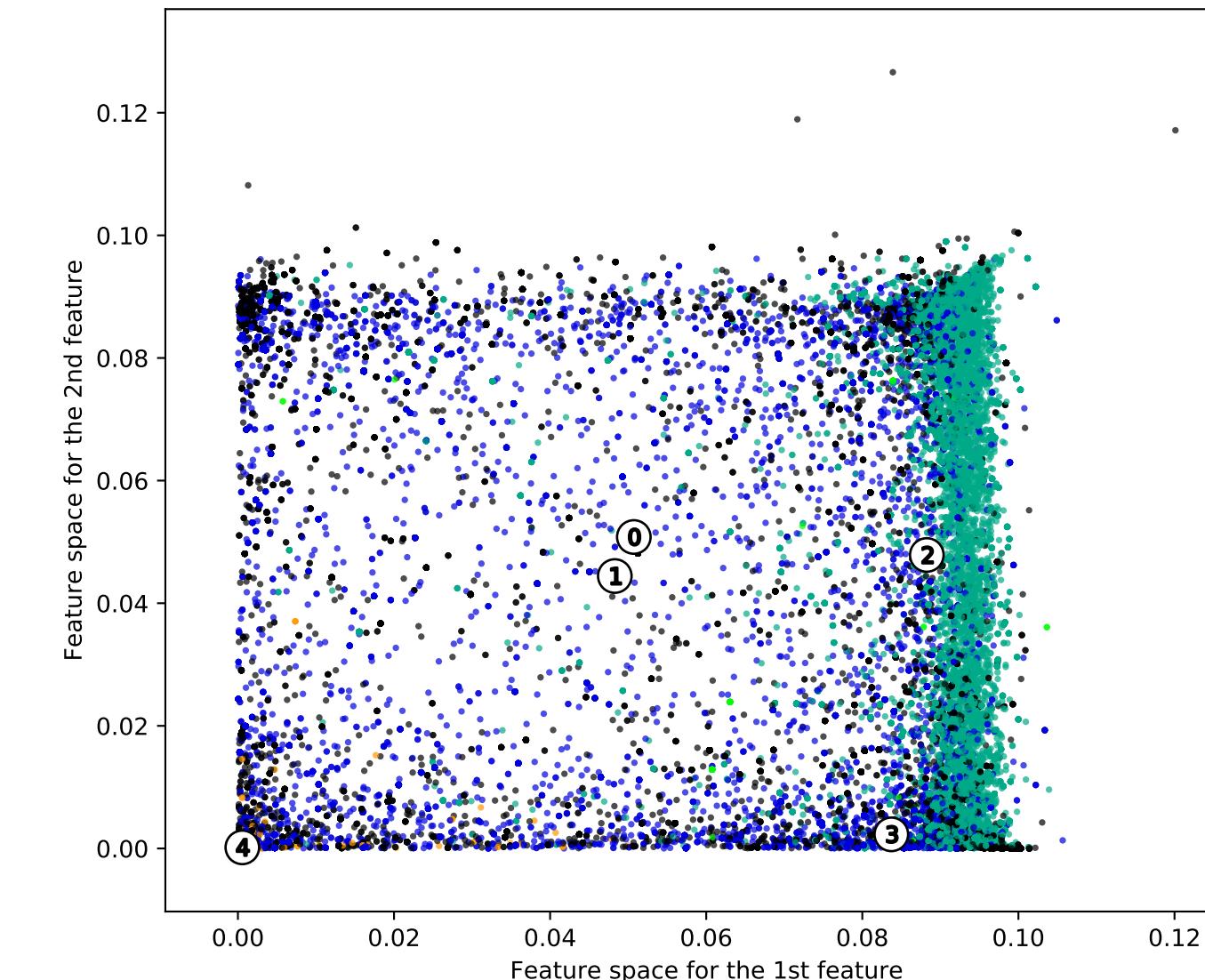


Silhouette analysis for KMeans clustering on sample data with n_clusters = 5 with Average Silhouette of: 0.16147154569625854

The silhouette plot for the various clusters.

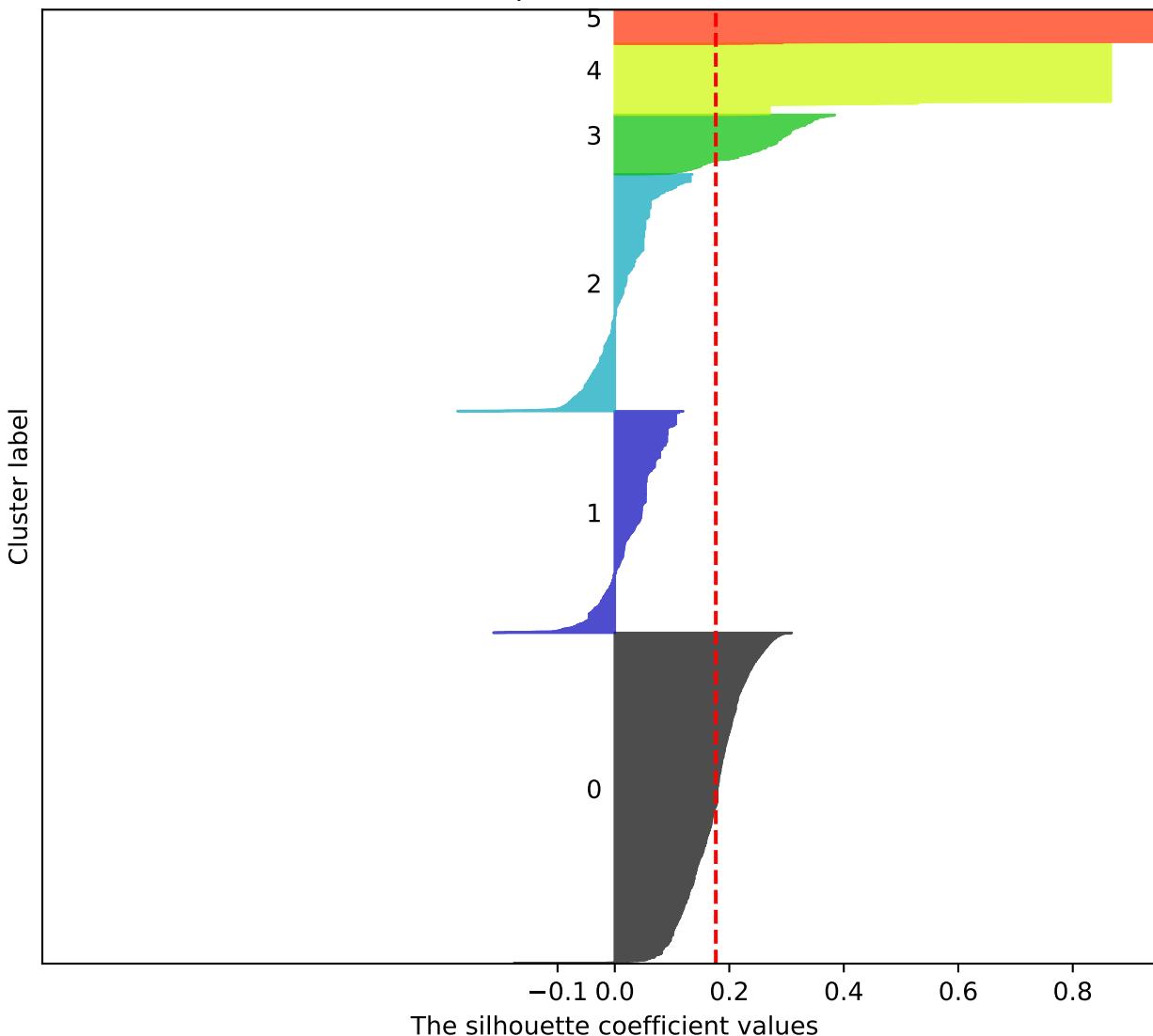


The visualization of the clustered data.

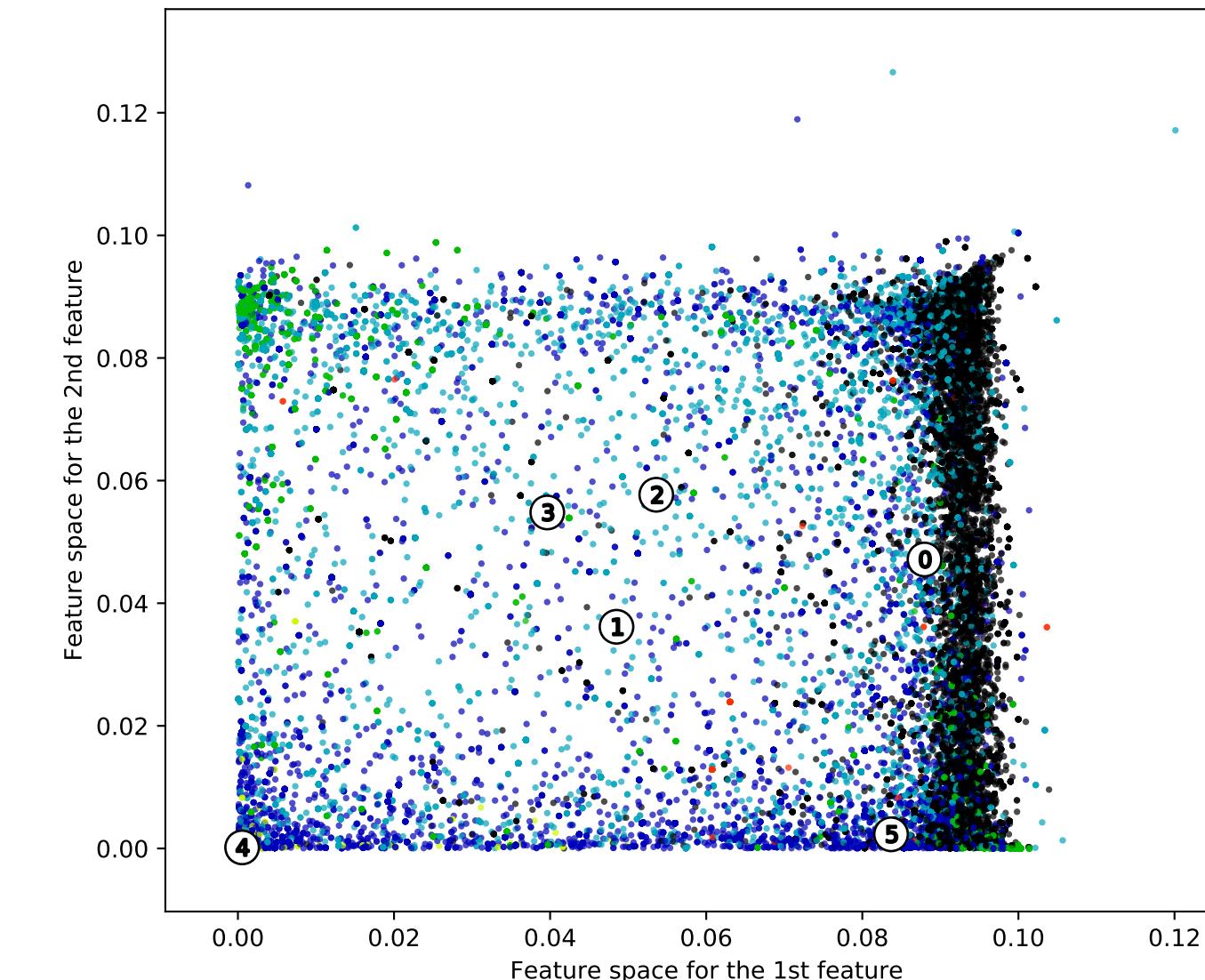


Silhouette analysis for KMeans clustering on sample data with n_clusters = 6 with Average Silhouette of: 0.17643728852272034

The silhouette plot for the various clusters.

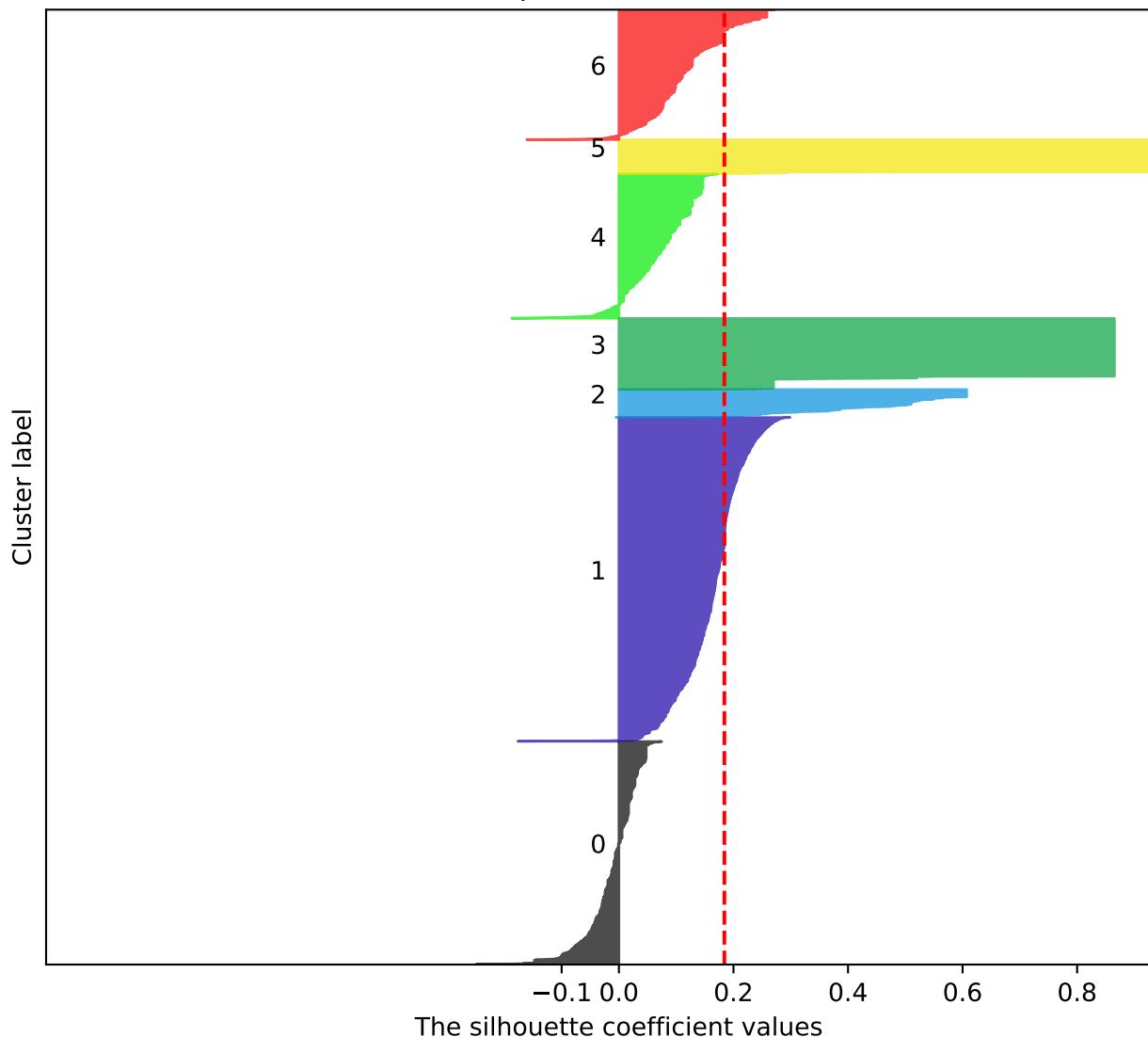


The visualization of the clustered data.

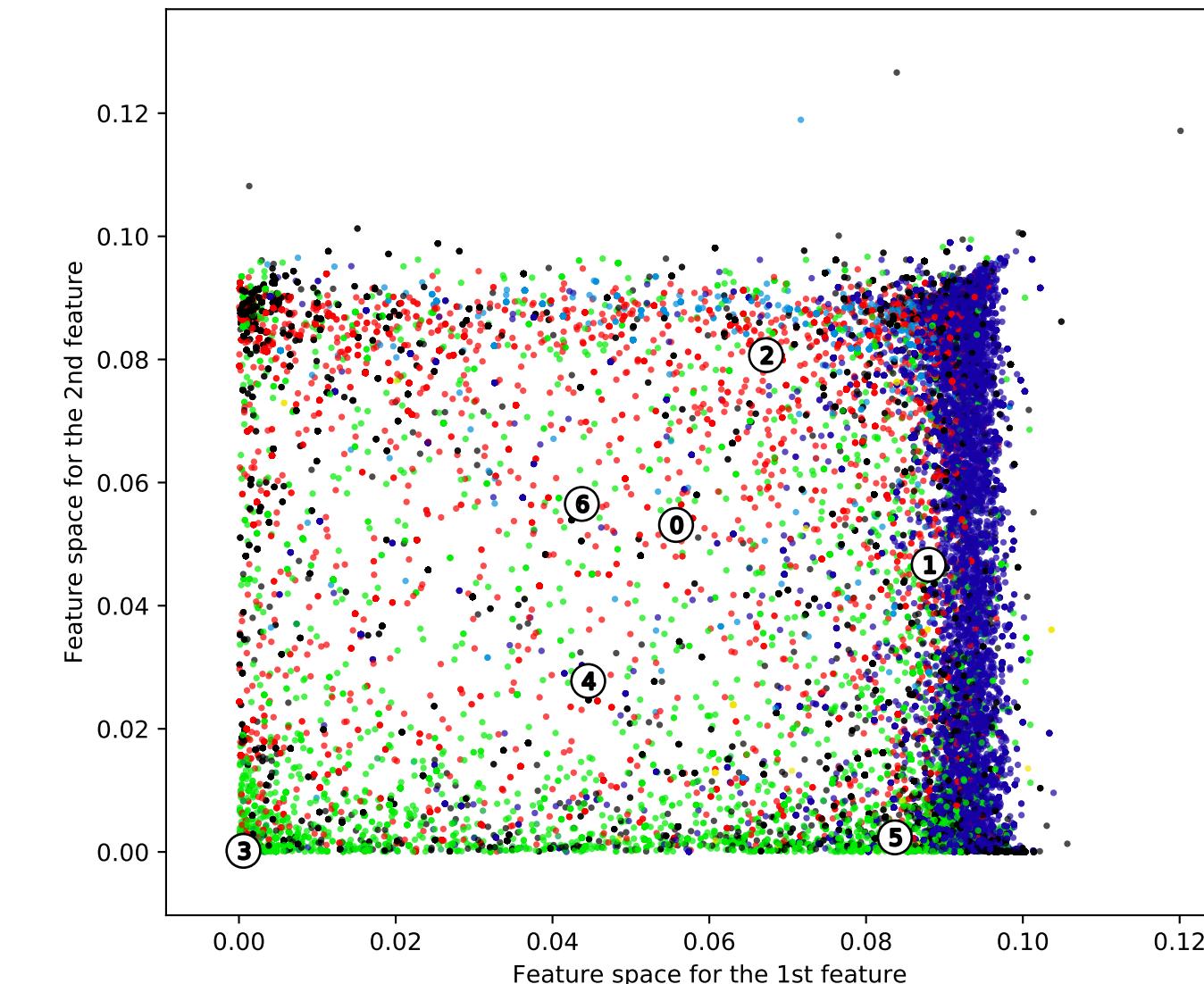


Silhouette analysis for KMeans clustering on sample data with n_clusters = 7 with Average Silhouette of: 0.1841035932302475

The silhouette plot for the various clusters.

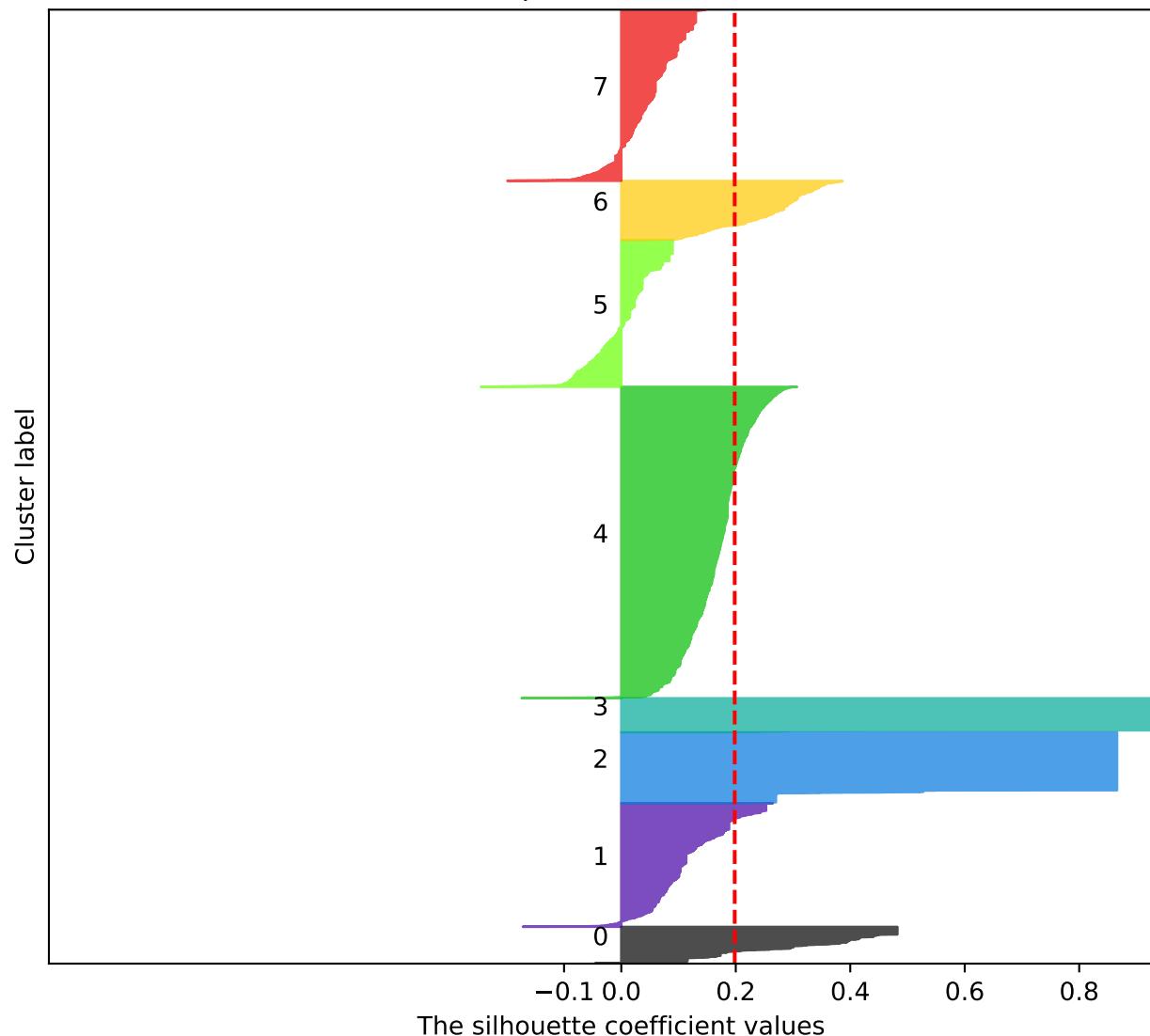


The visualization of the clustered data.

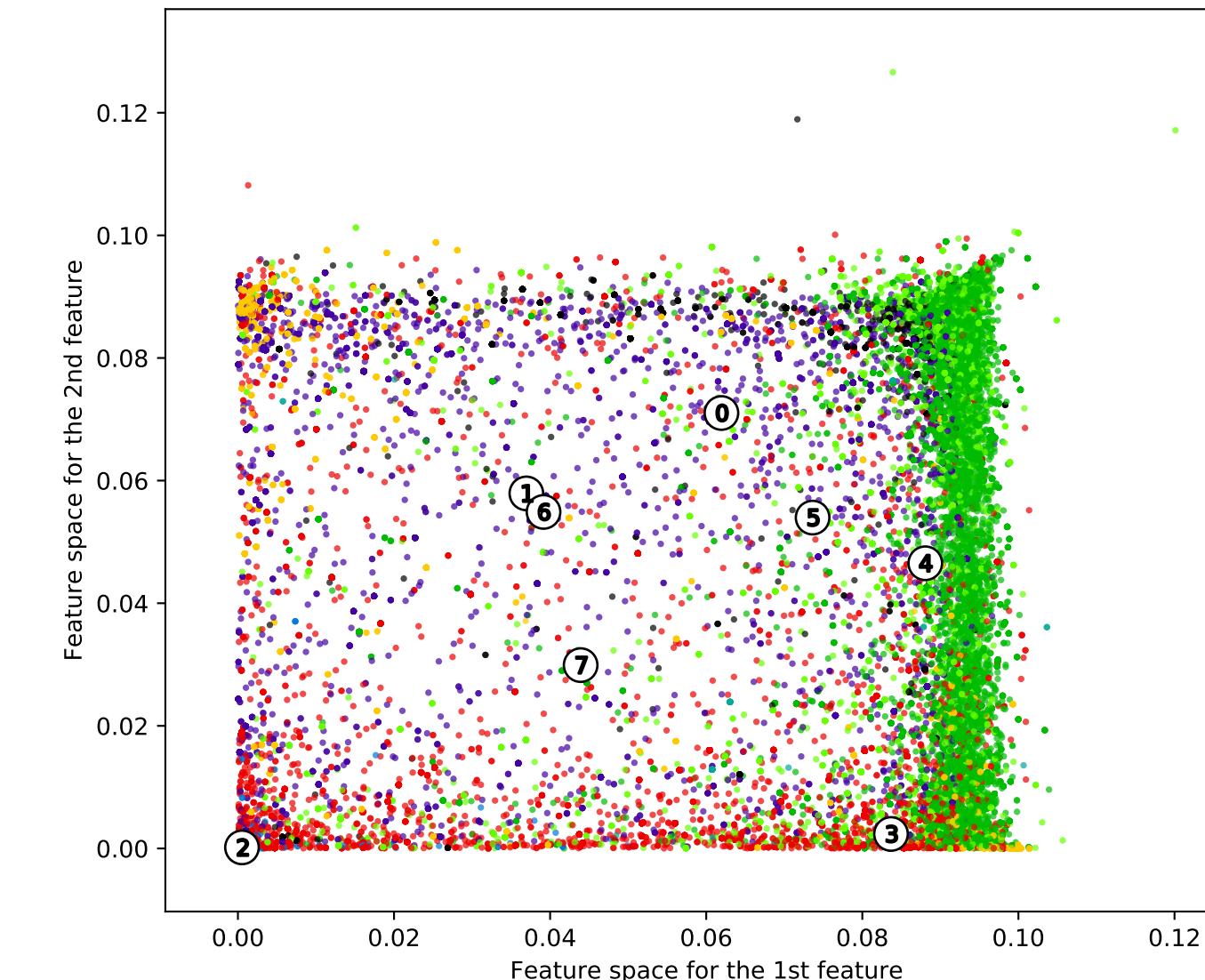


Silhouette analysis for KMeans clustering on sample data with n_clusters = 8 with Average Silhouette of: 0.1981311424446106

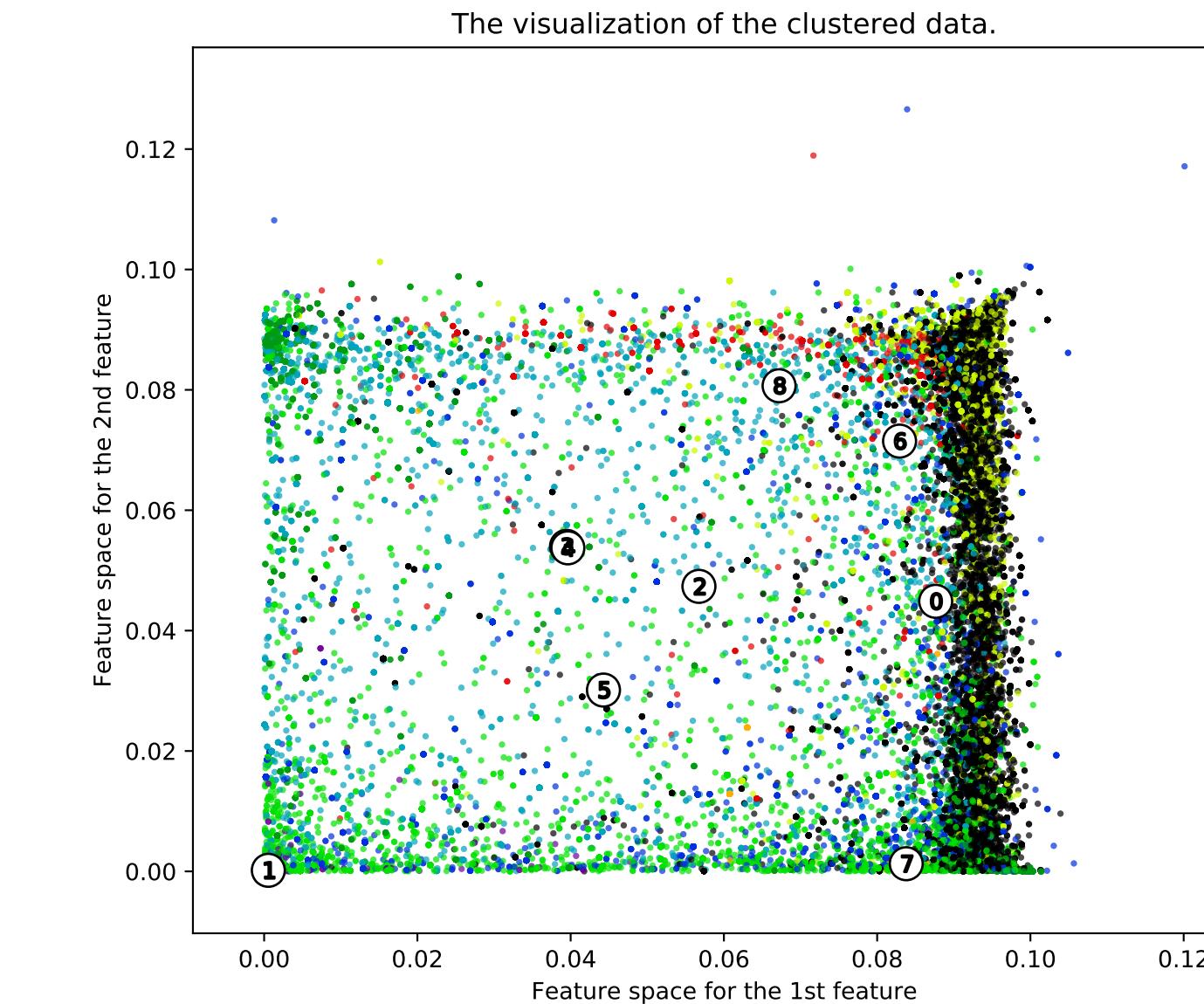
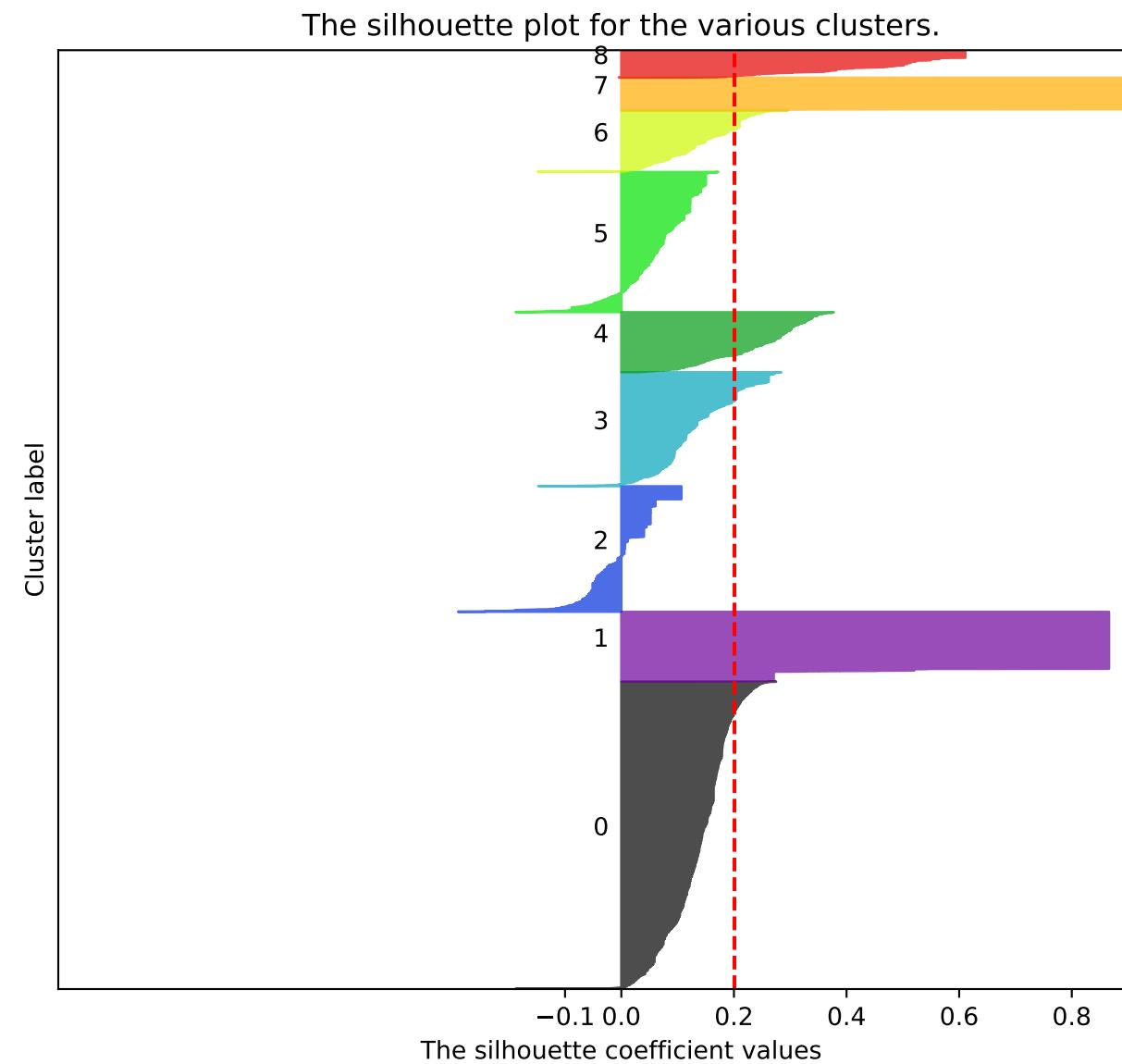
The silhouette plot for the various clusters.



The visualization of the clustered data.

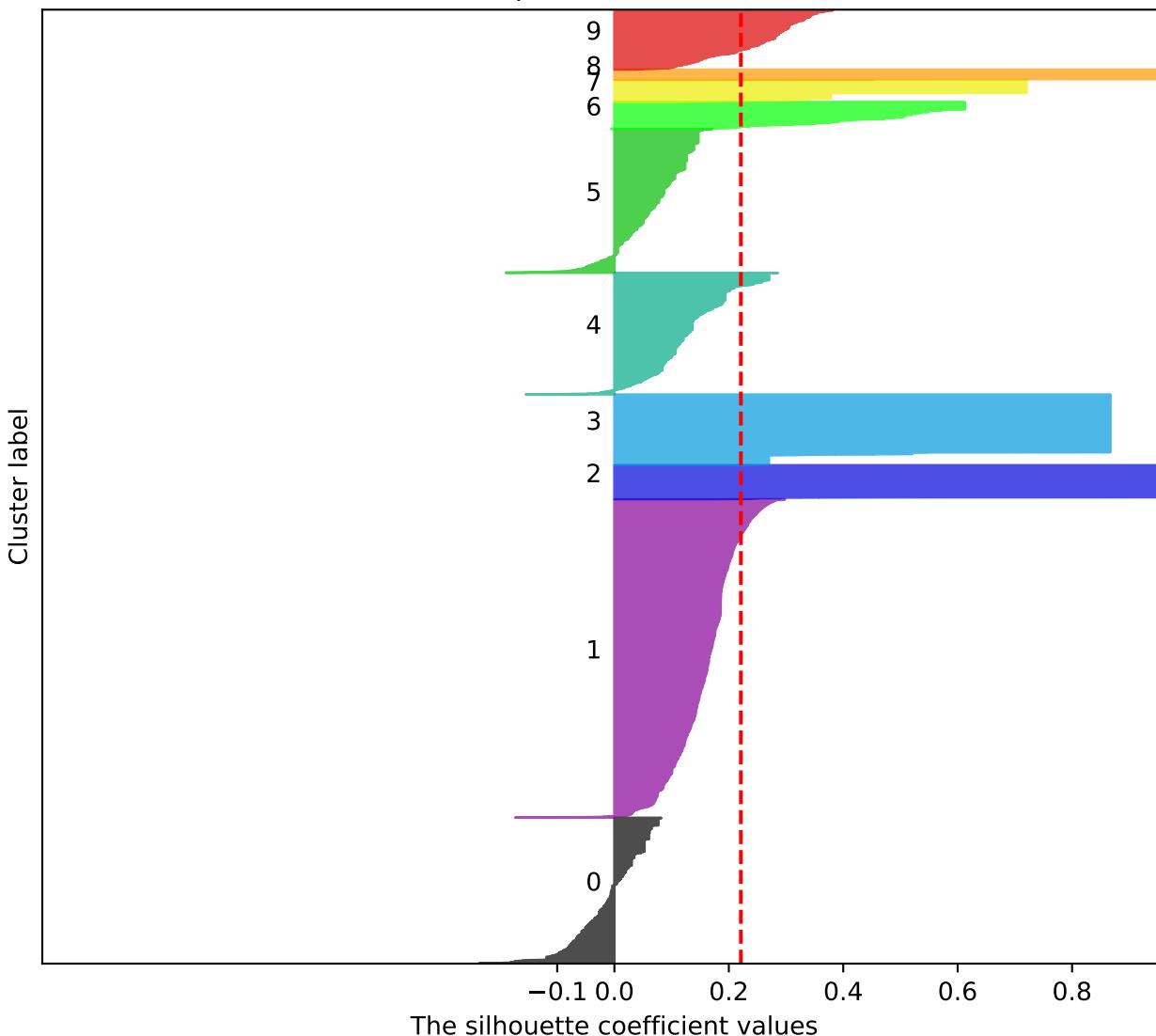


Silhouette analysis for KMeans clustering on sample data with n_clusters = 9 with Average Silhouette of: 0.2009243220090866

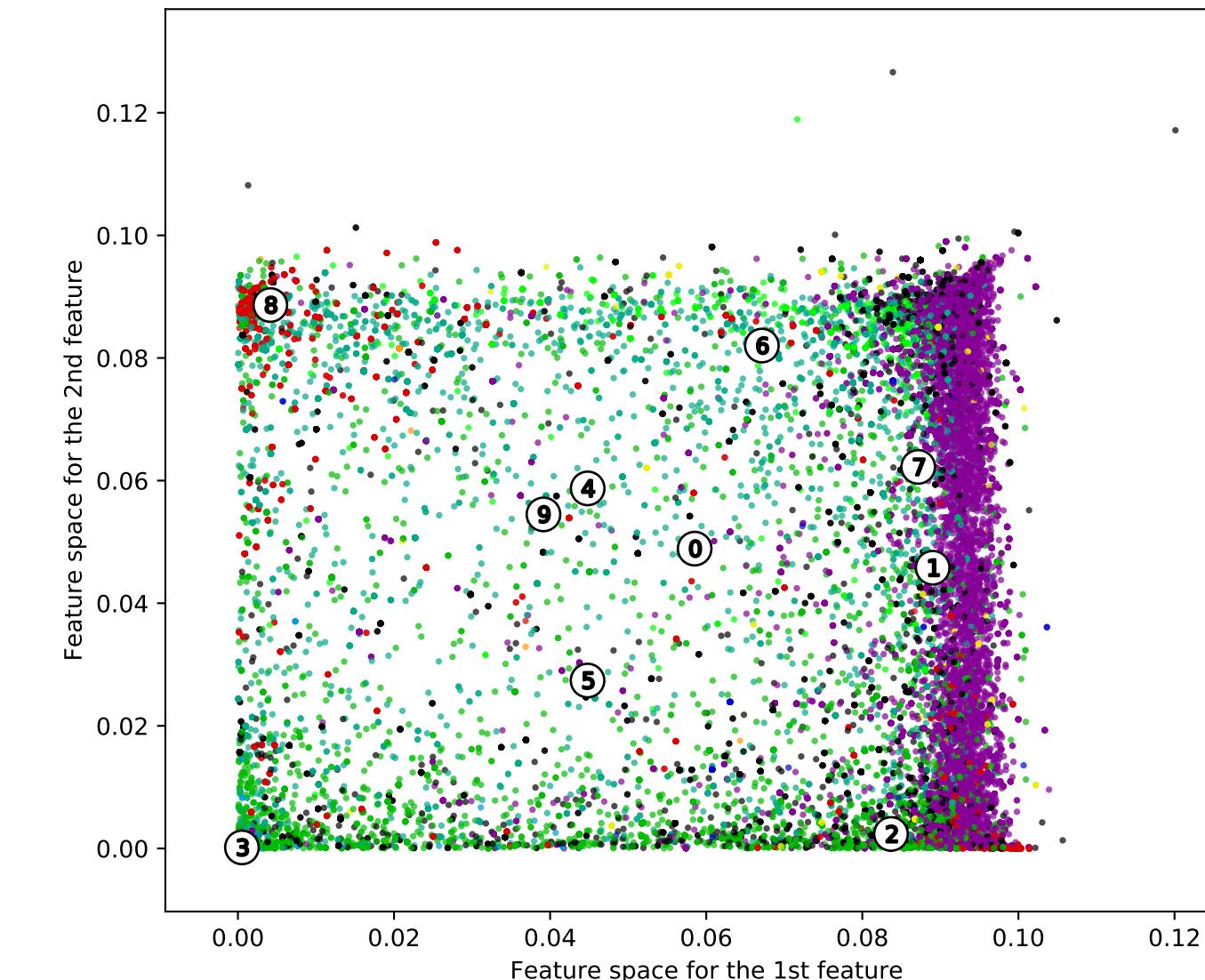


Silhouette analysis for KMeans clustering on sample data with n_clusters = 10 with Average Silhouette of: 0.2210981249809265

The silhouette plot for the various clusters.

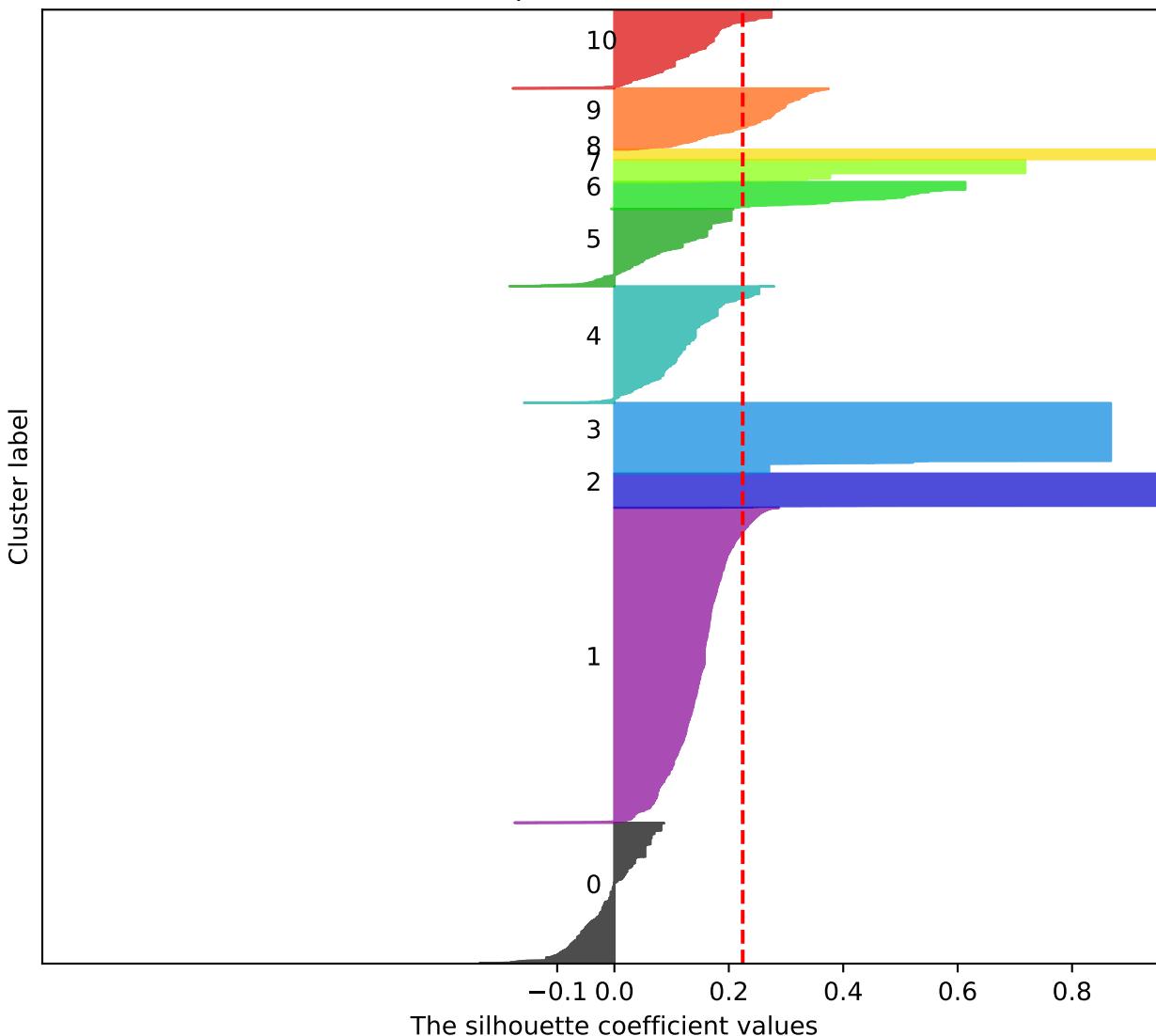


The visualization of the clustered data.

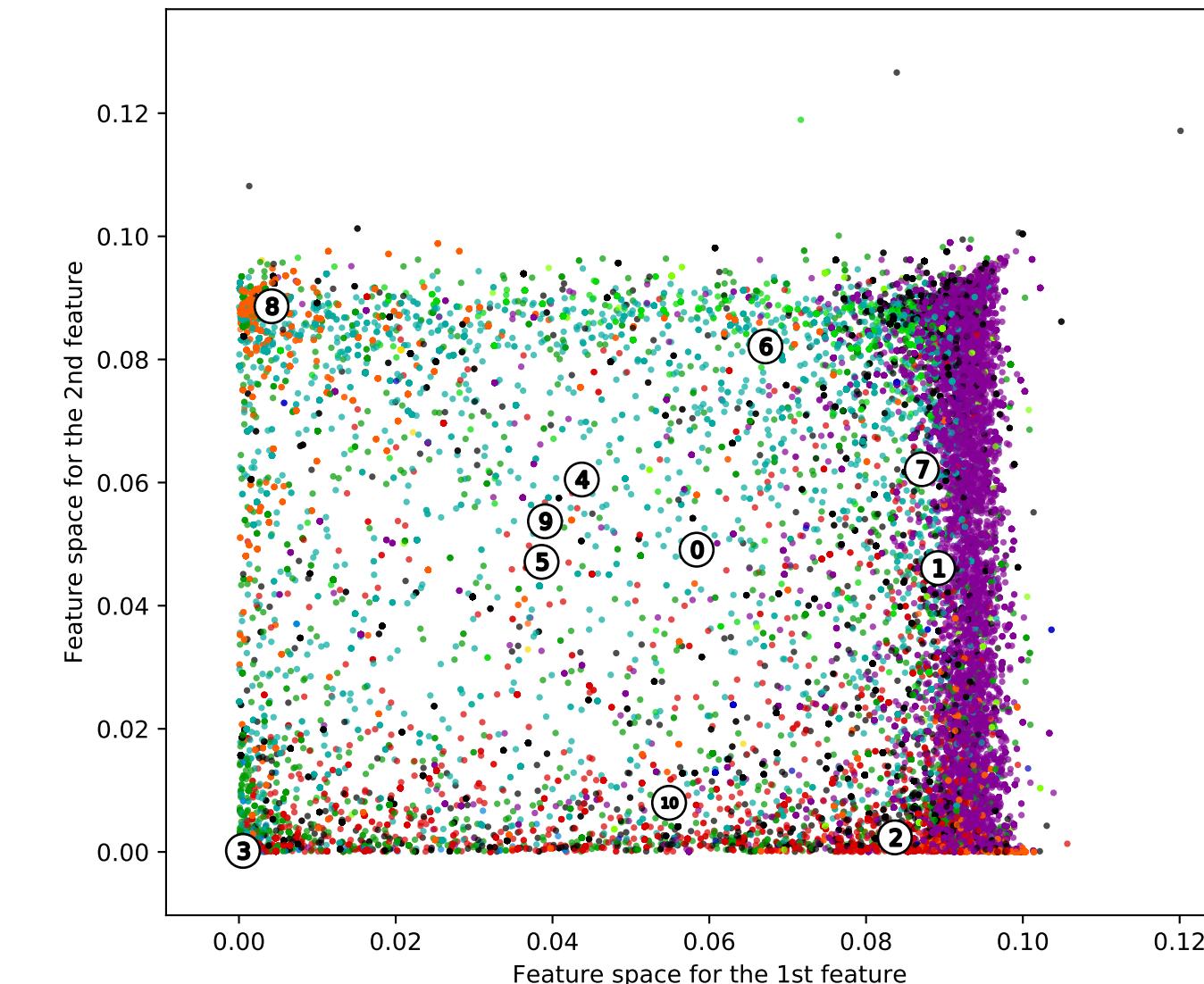


Silhouette analysis for KMeans clustering on sample data with n_clusters = 11 with Average Silhouette of: 0.22428087890148163

The silhouette plot for the various clusters.

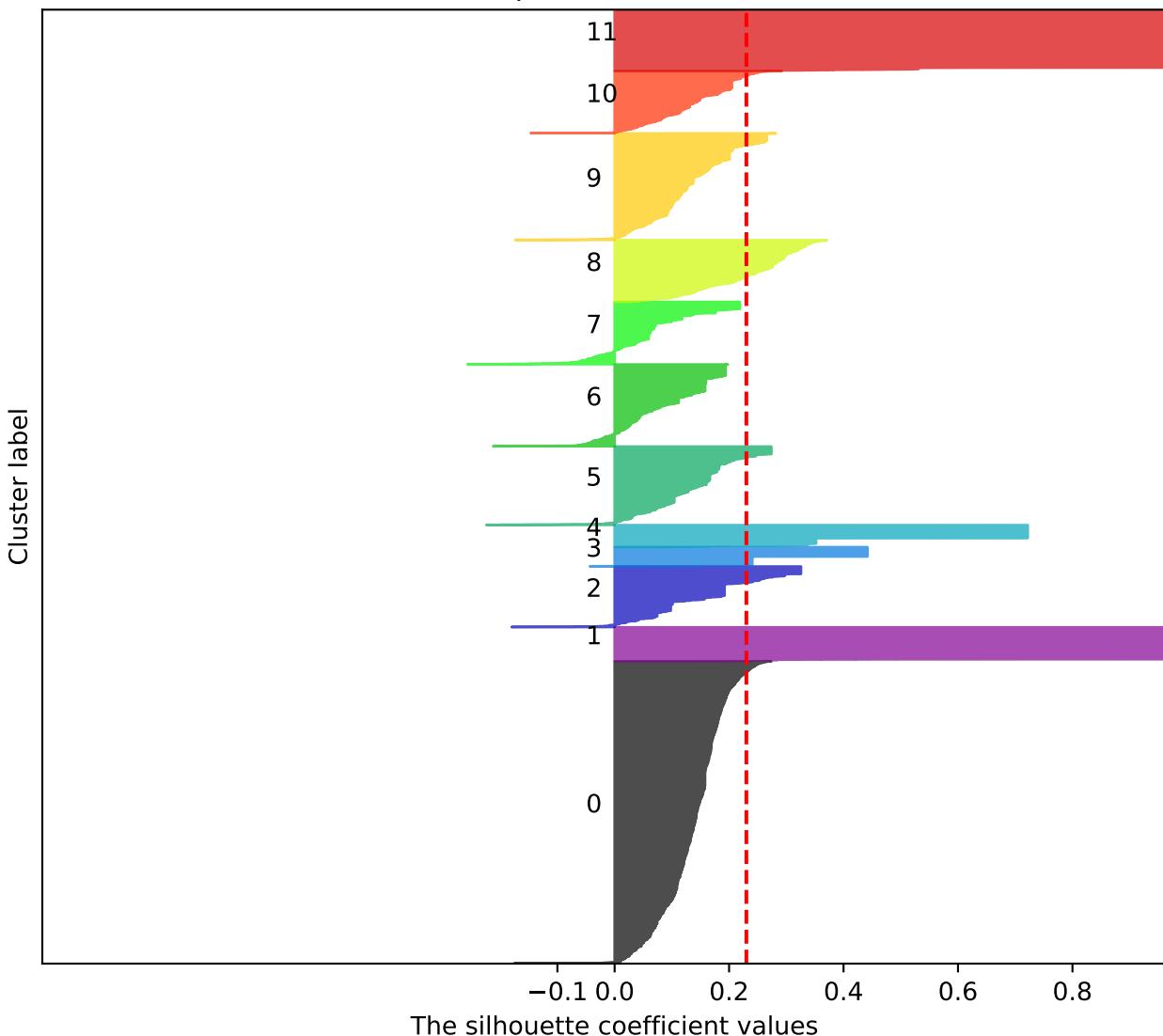


The visualization of the clustered data.

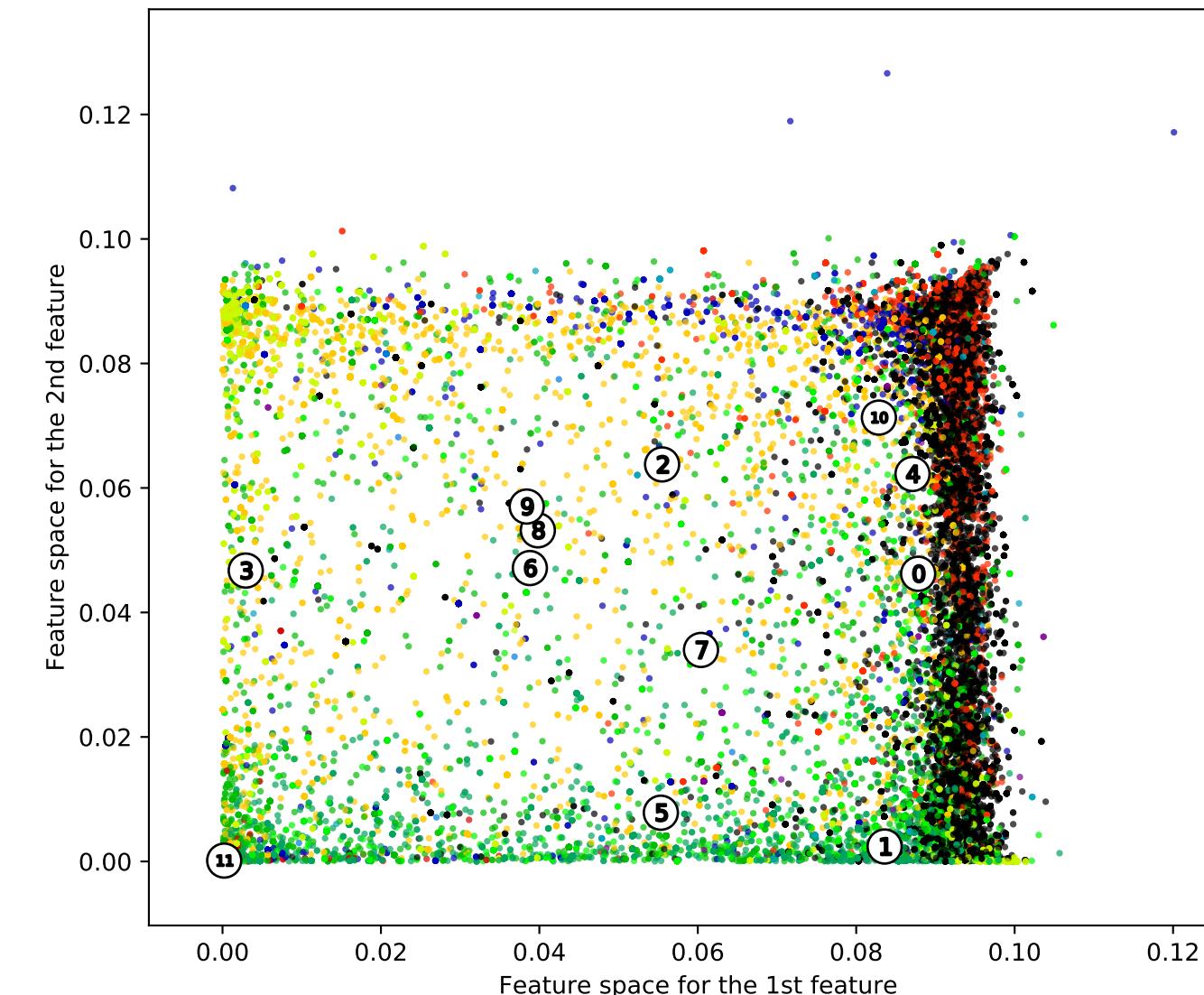


Silhouette analysis for KMeans clustering on sample data with n_clusters = 12 with Average Silhouette of: 0.2302296757698059

The silhouette plot for the various clusters.

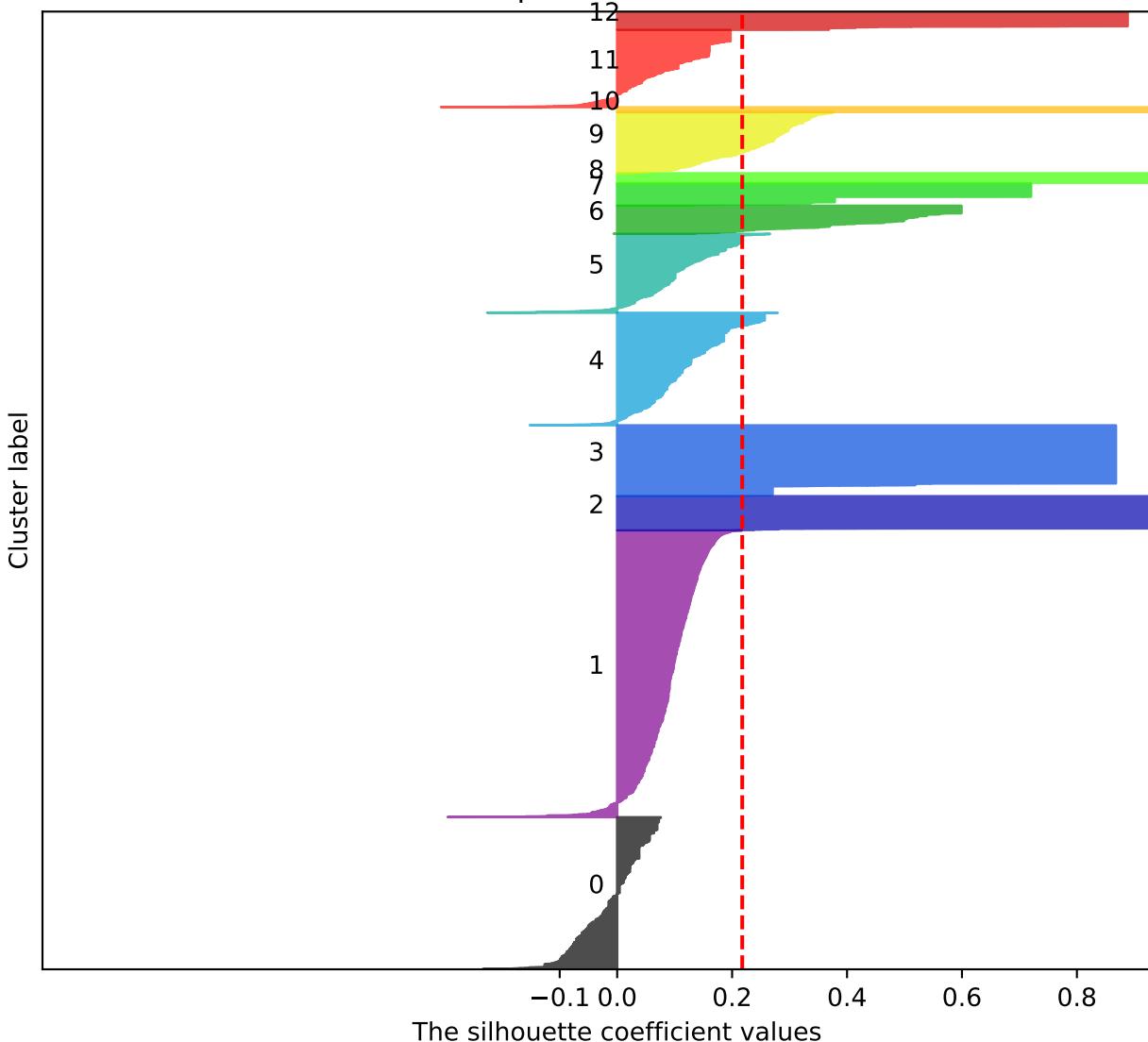


The visualization of the clustered data.

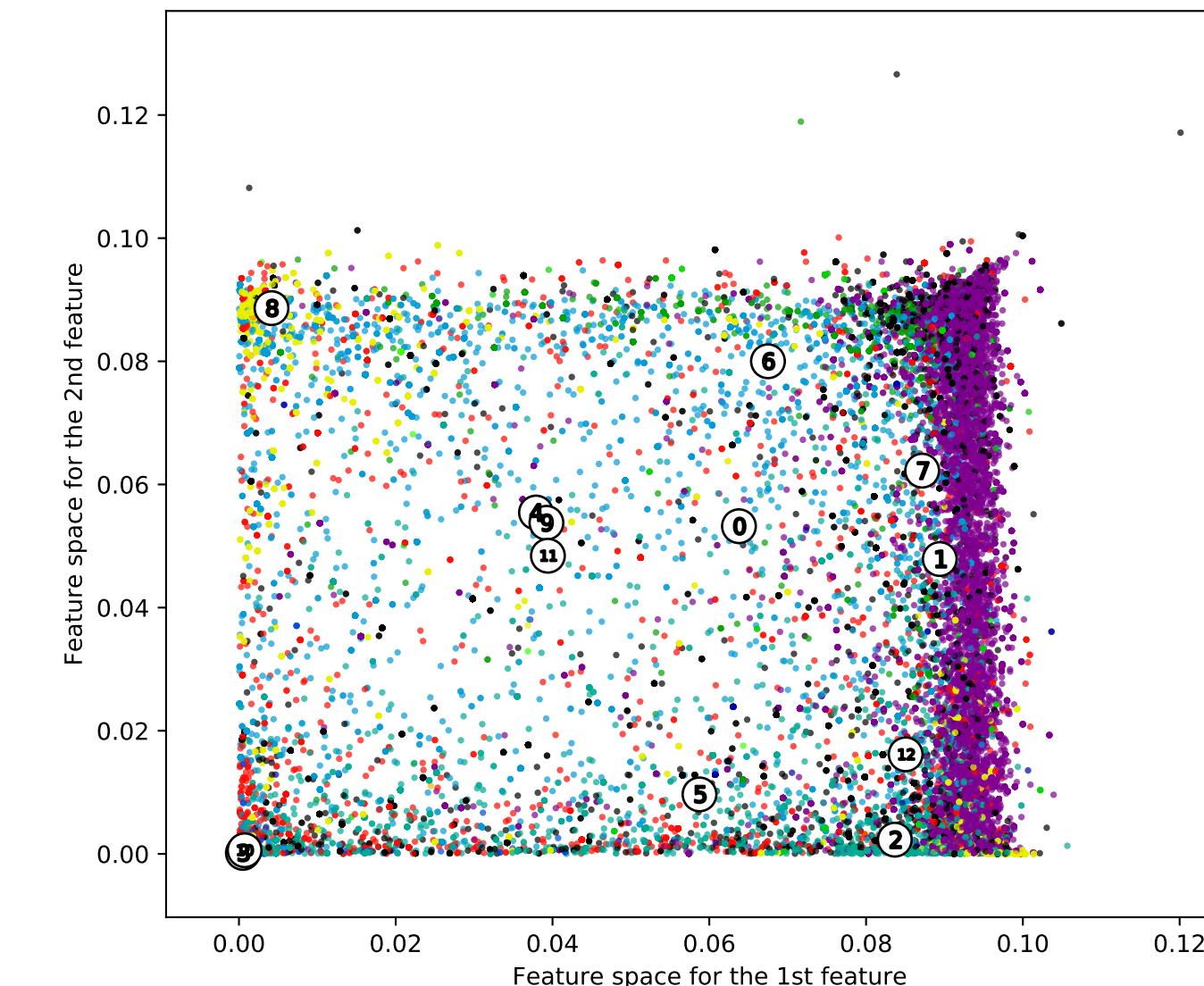


Silhouette analysis for KMeans clustering on sample data with n_clusters = 13 with Average Silhouette of: 0.21764975786209106

The silhouette plot for the various clusters.

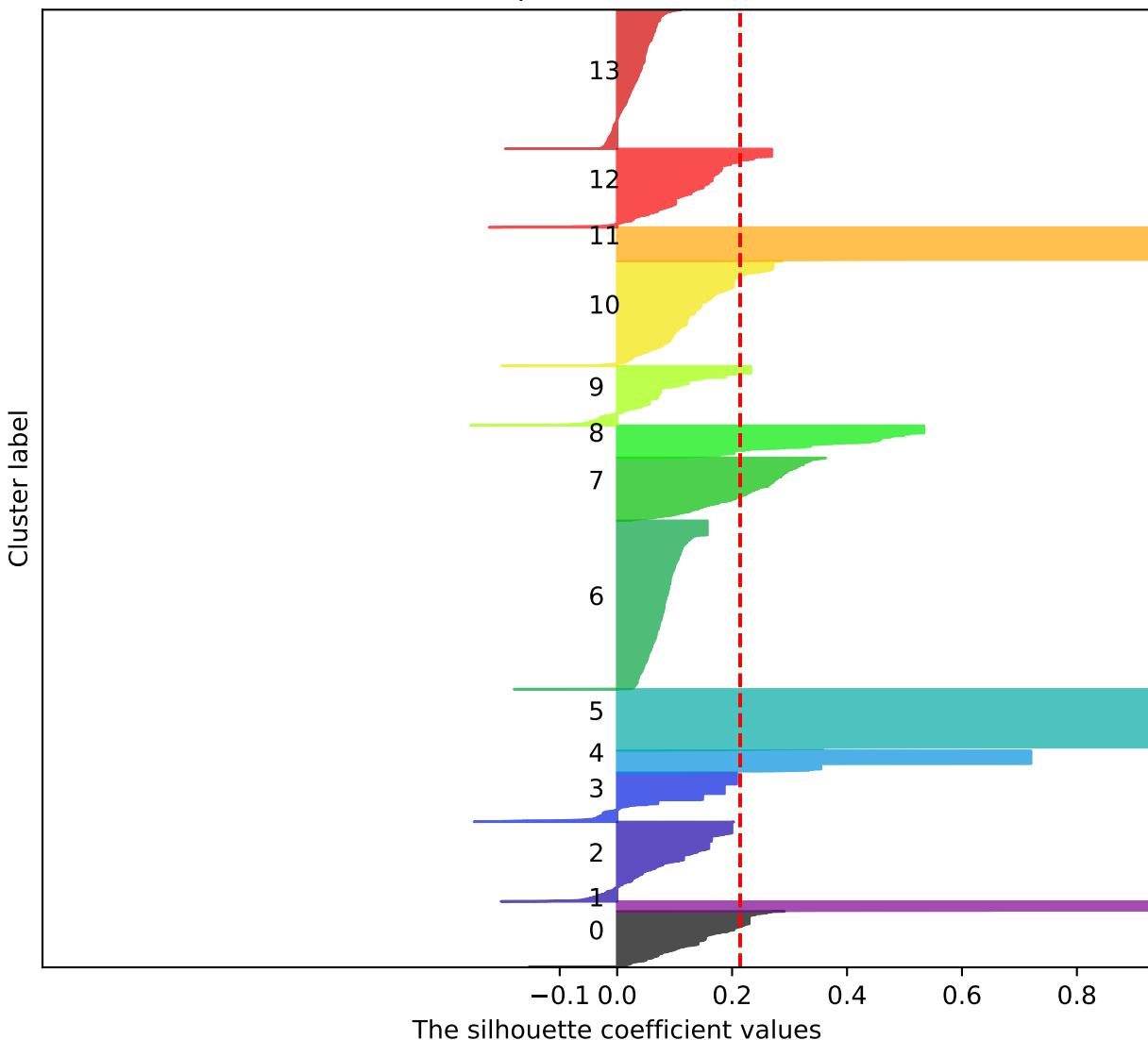


The visualization of the clustered data.

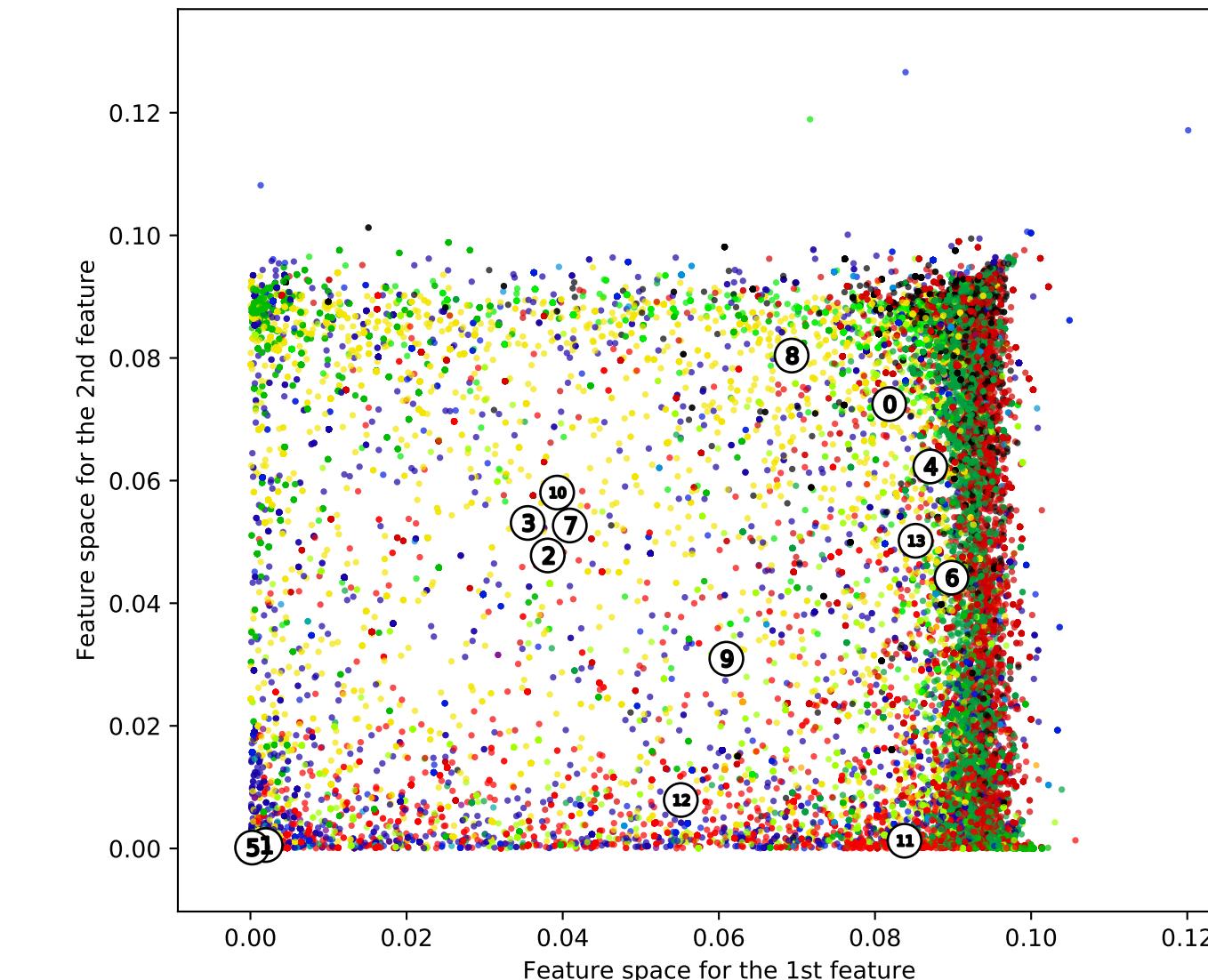


Silhouette analysis for KMeans clustering on sample data with n_clusters = 14 with Average Silhouette of: 0.21401412785053253

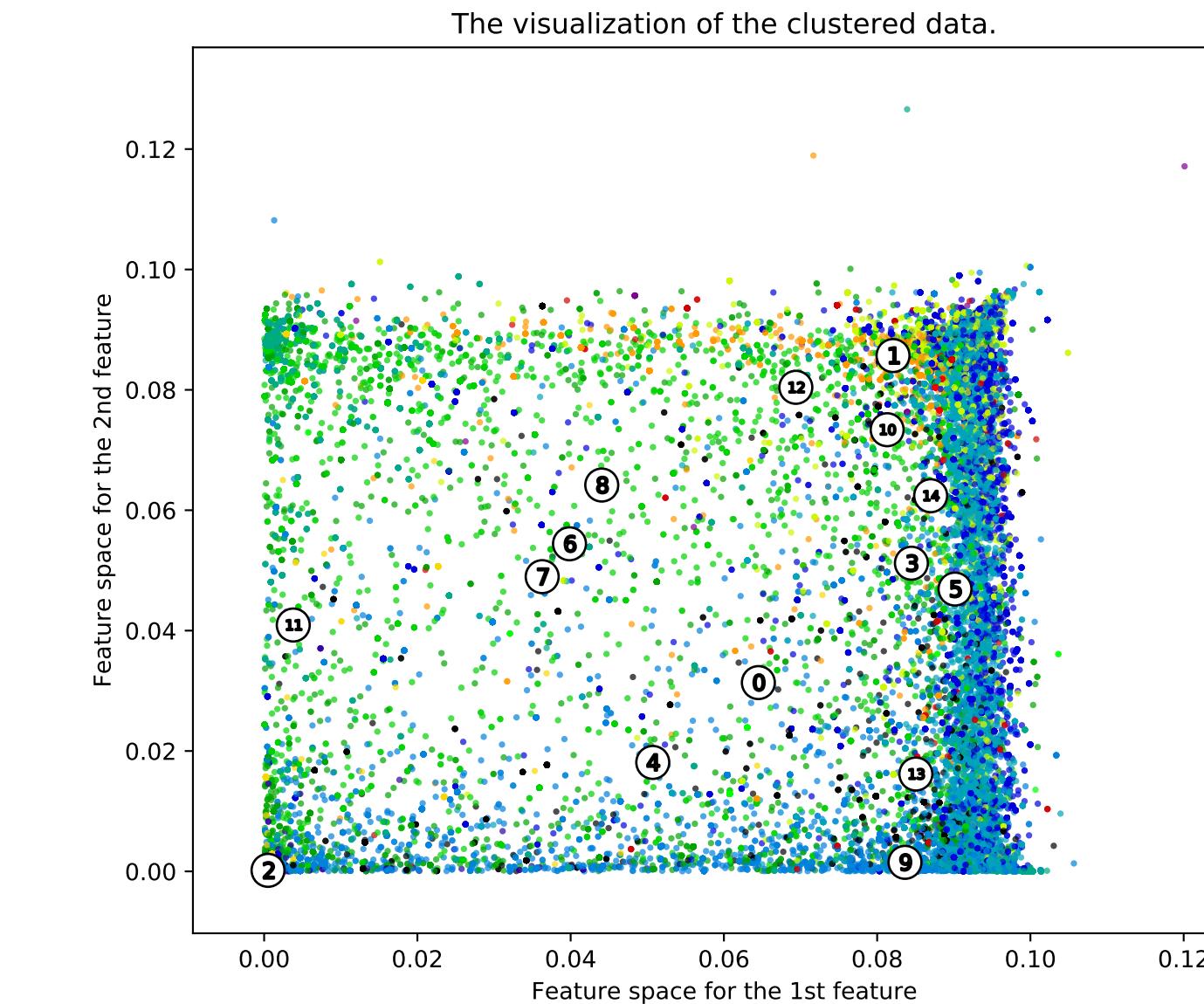
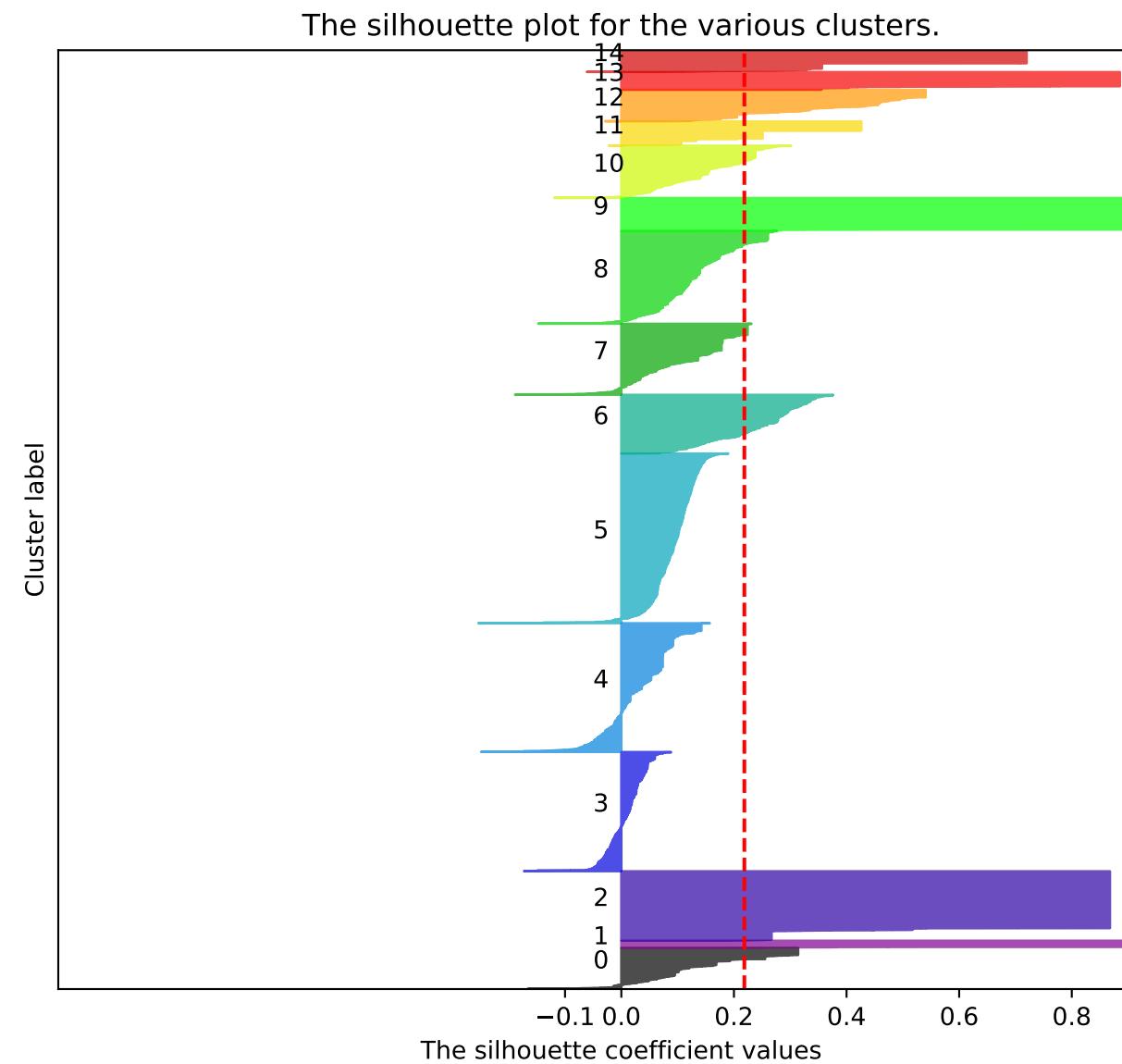
The silhouette plot for the various clusters.



The visualization of the clustered data.

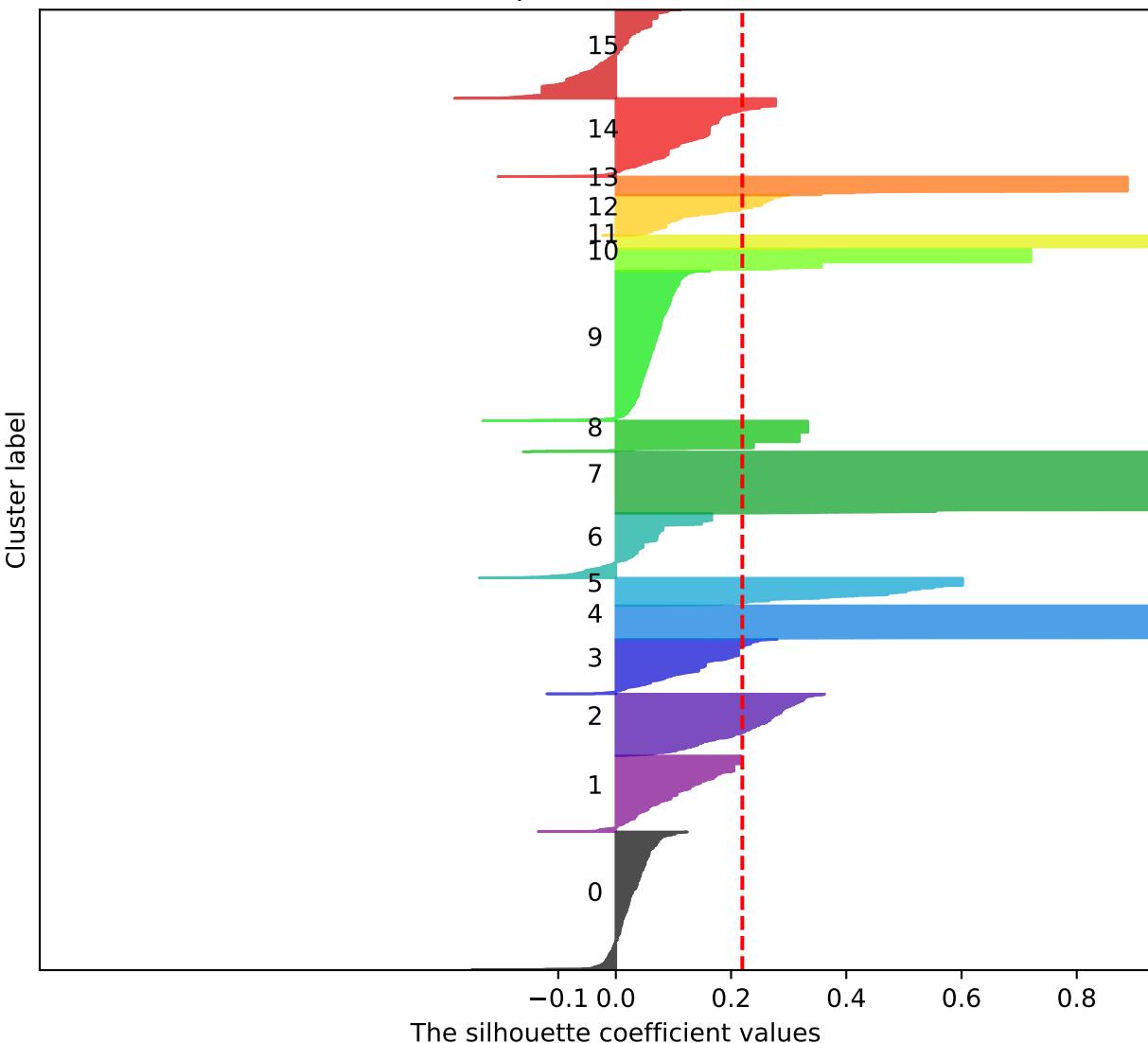


Silhouette analysis for KMeans clustering on sample data with n_clusters = 15 with Average Silhouette of: 0.218507781624794

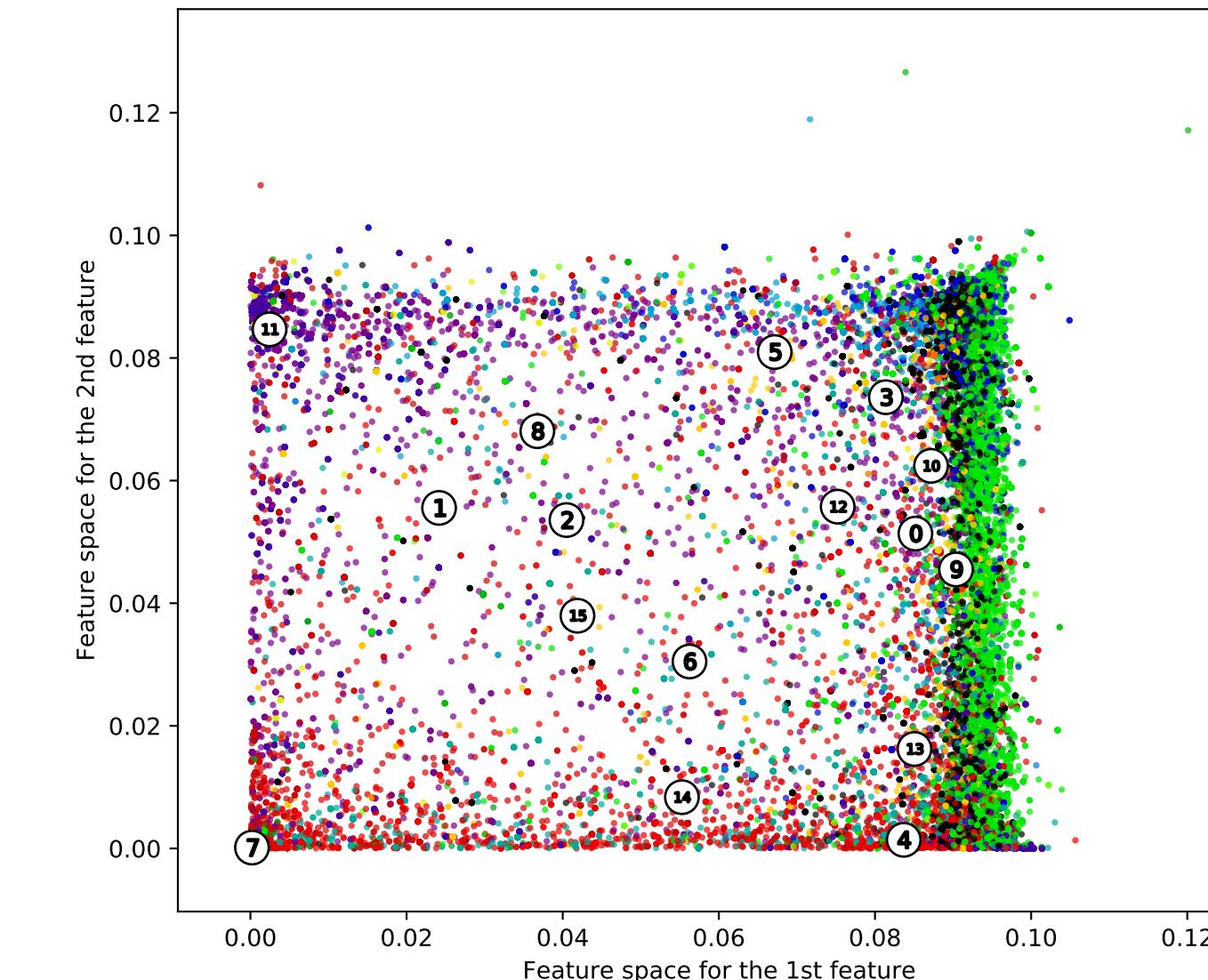


Silhouette analysis for KMeans clustering on sample data with n_clusters = 16 with Average Silhouette of: 0.21949709951877594

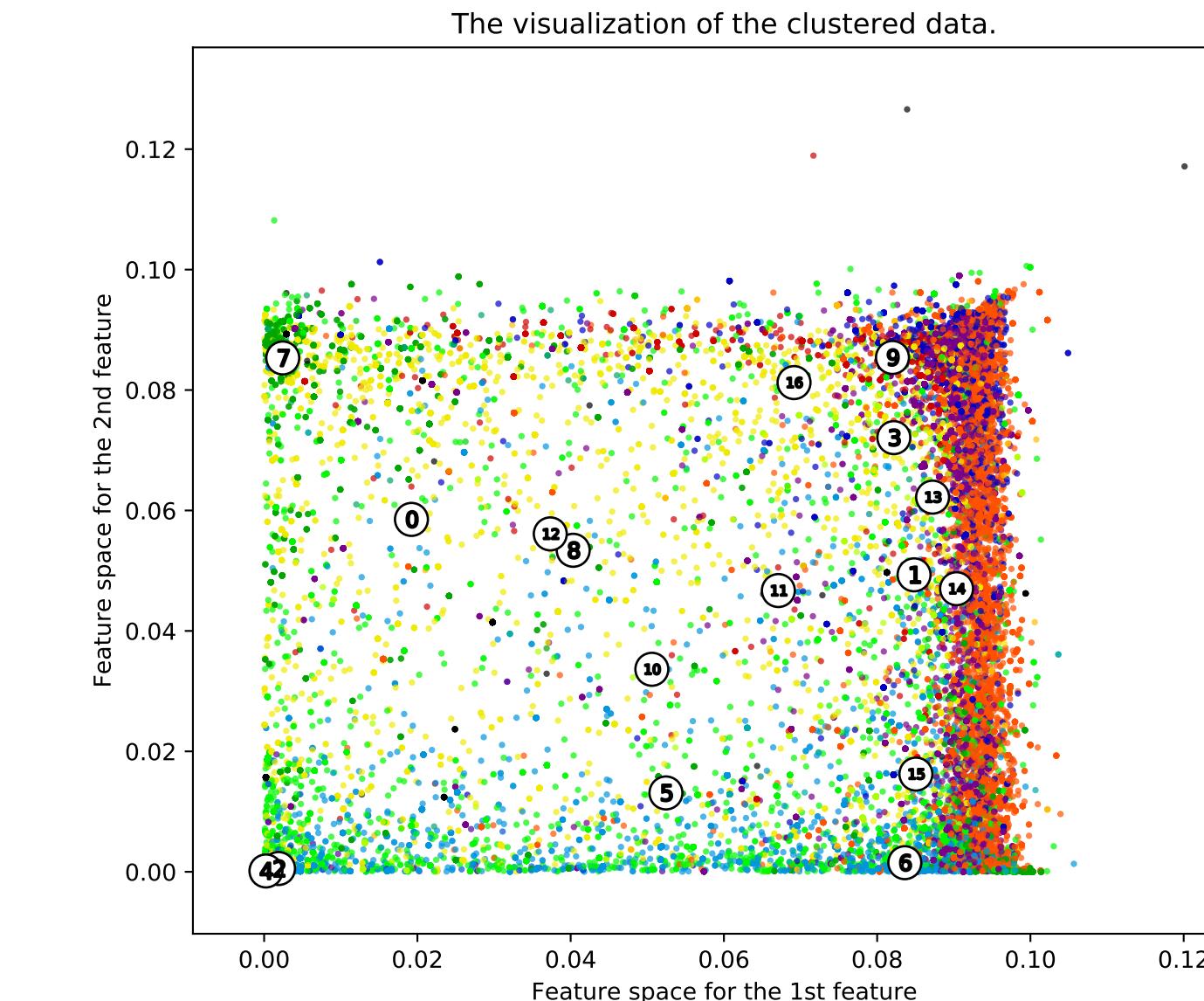
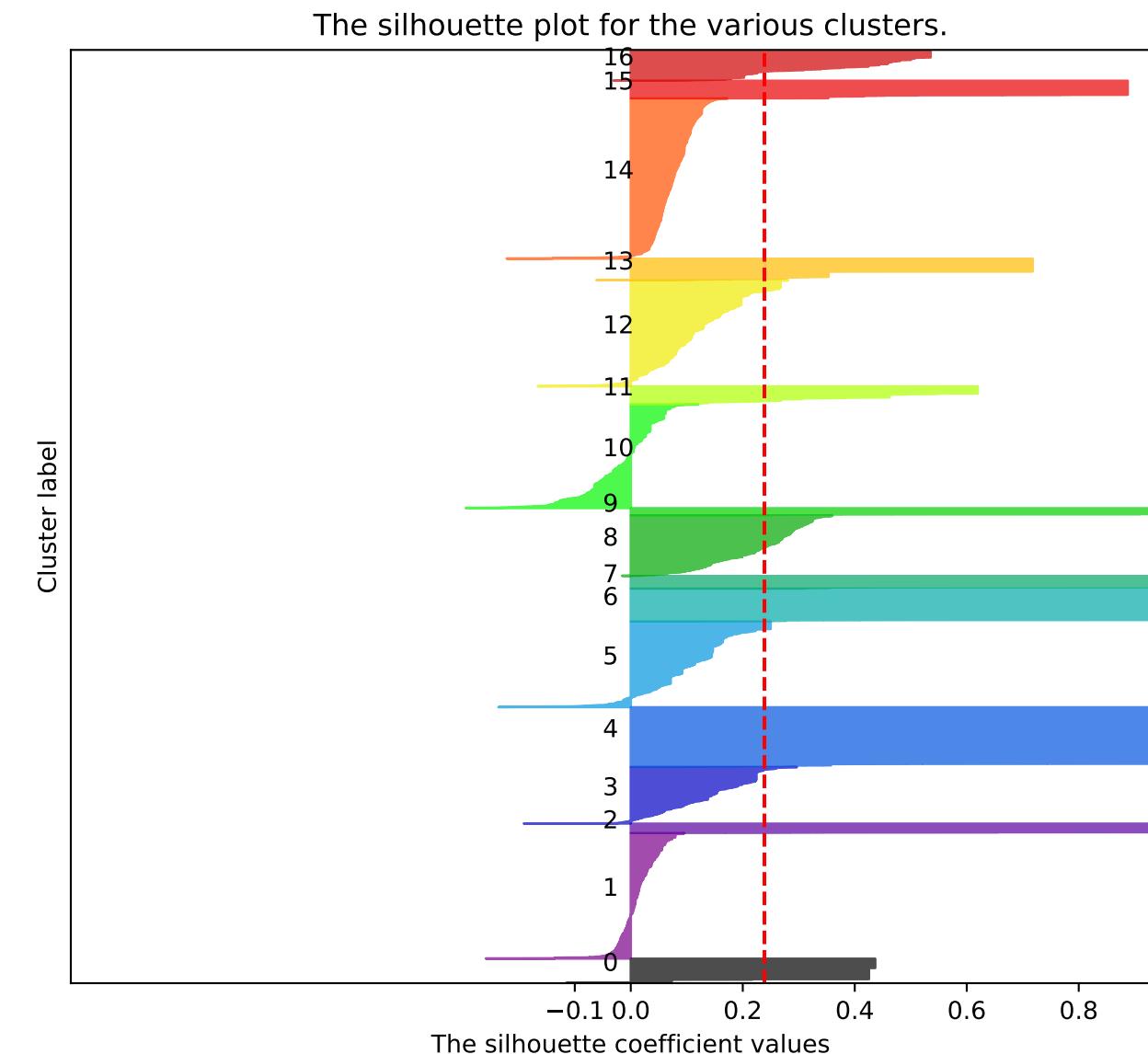
The silhouette plot for the various clusters.



The visualization of the clustered data.

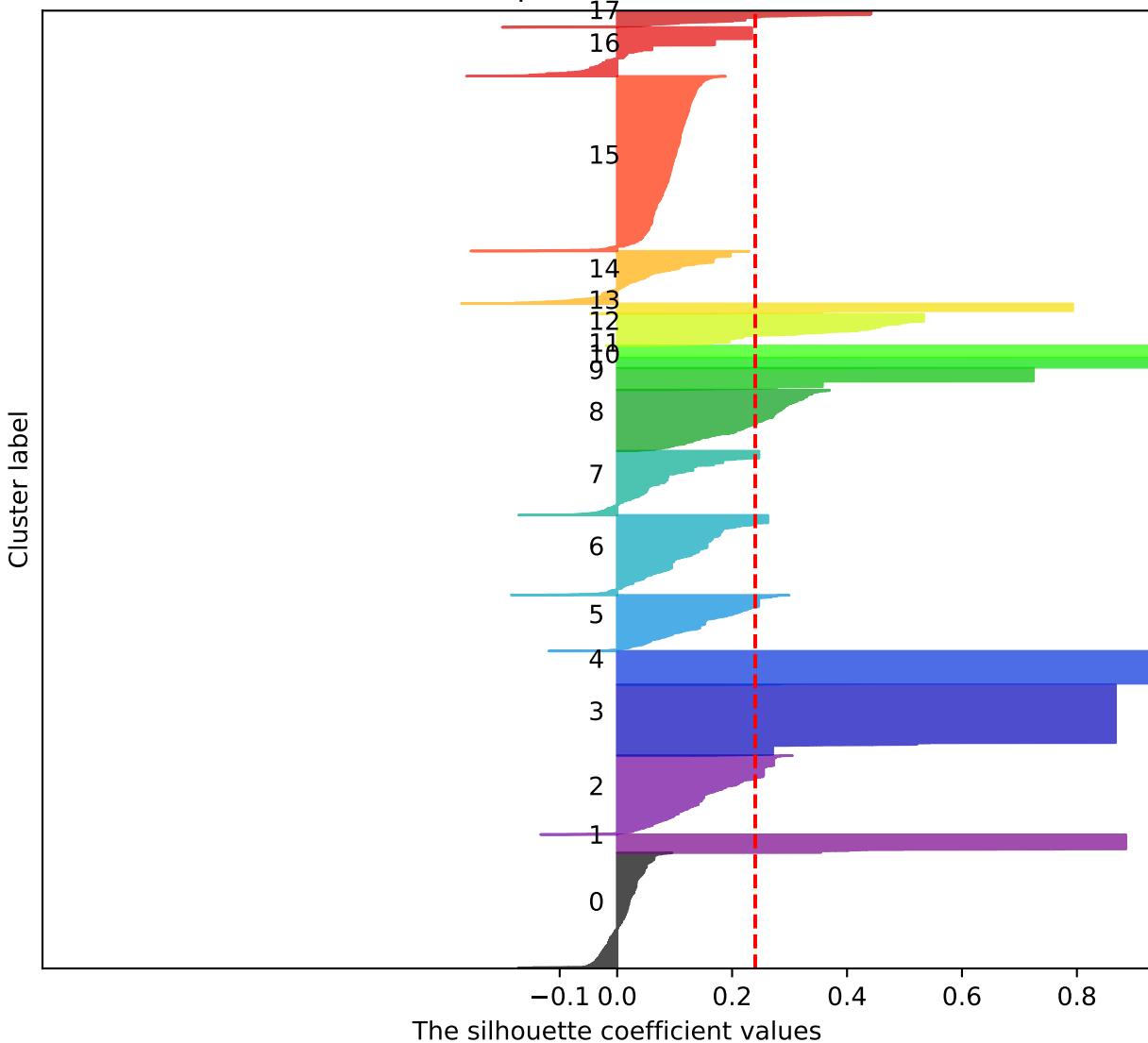


Silhouette analysis for KMeans clustering on sample data with n_clusters = 17 with Average Silhouette of: 0.23869384825229645

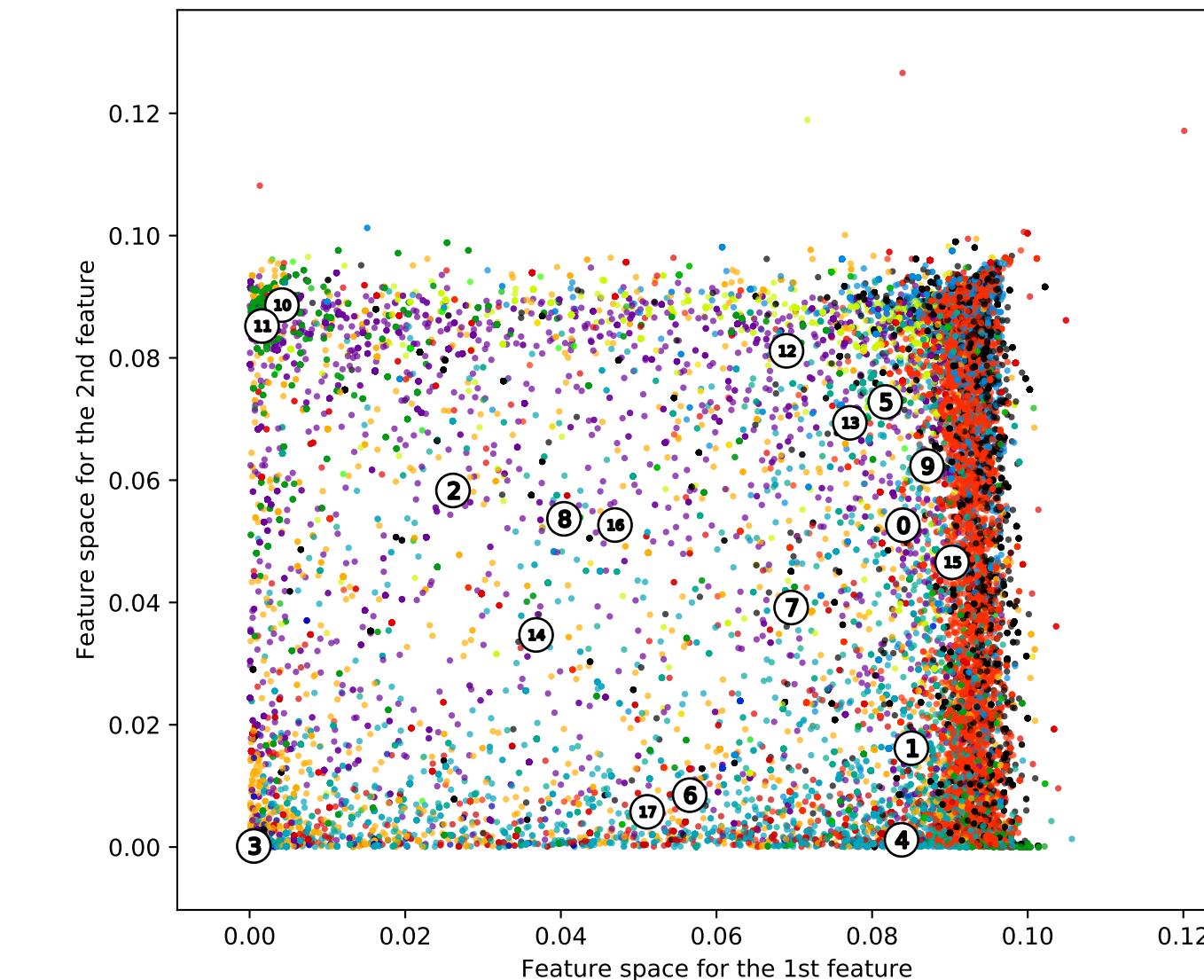


Silhouette analysis for KMeans clustering on sample data with n_clusters = 18 with Average Silhouette of: 0.2402401566505432

The silhouette plot for the various clusters.

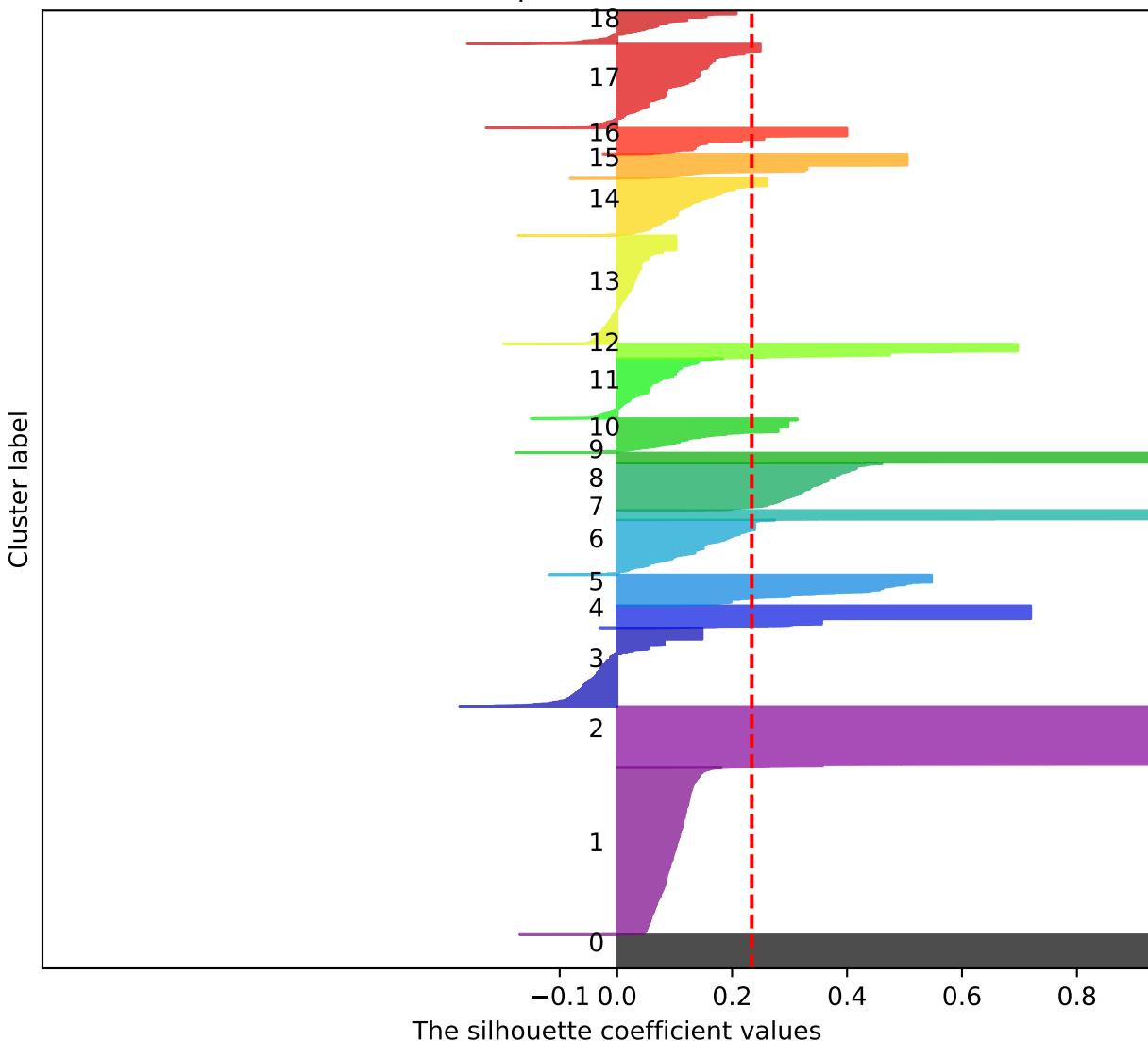


The visualization of the clustered data.

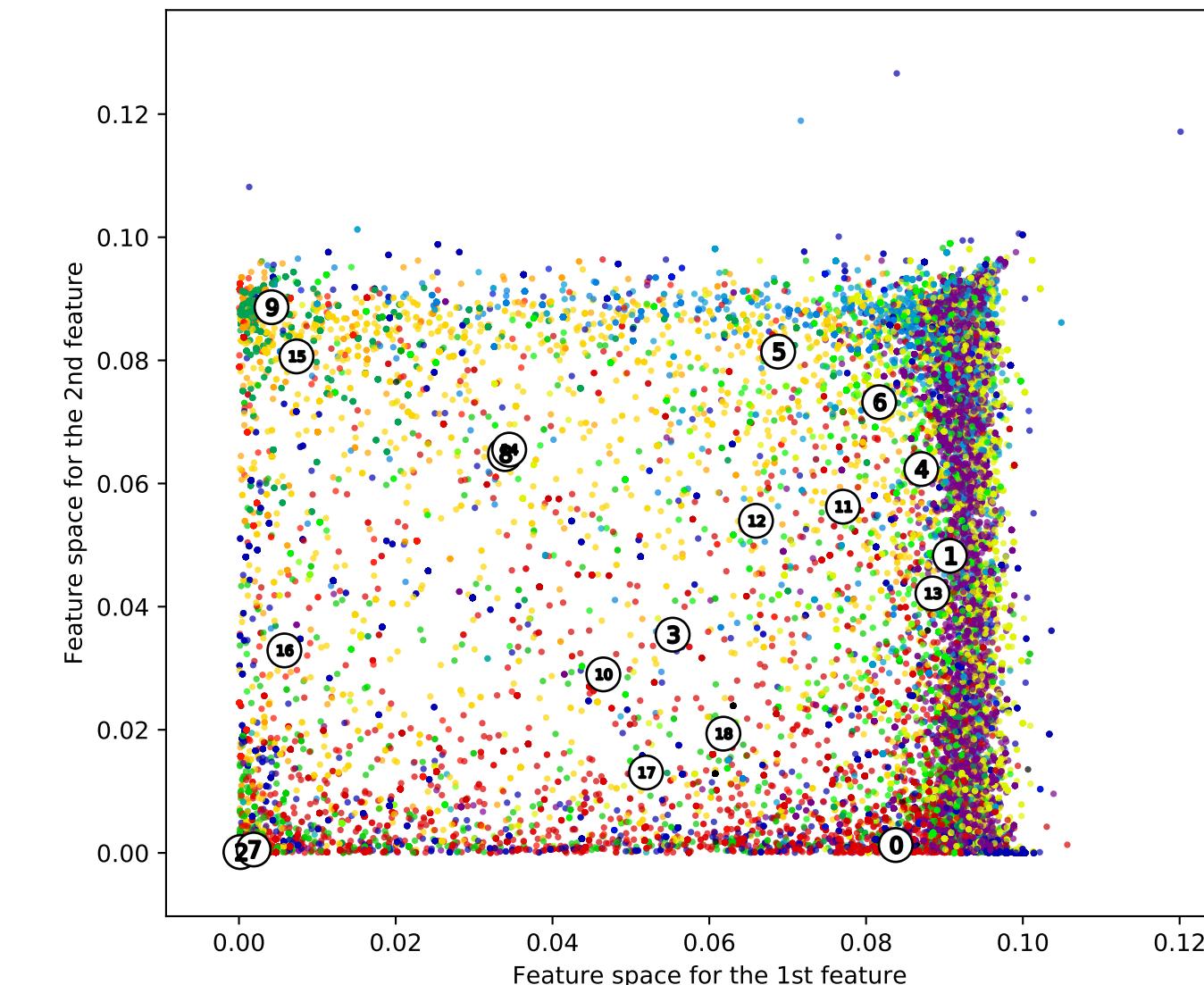


Silhouette analysis for KMeans clustering on sample data with n_clusters = 19 with Average Silhouette of: 0.2342958003282547

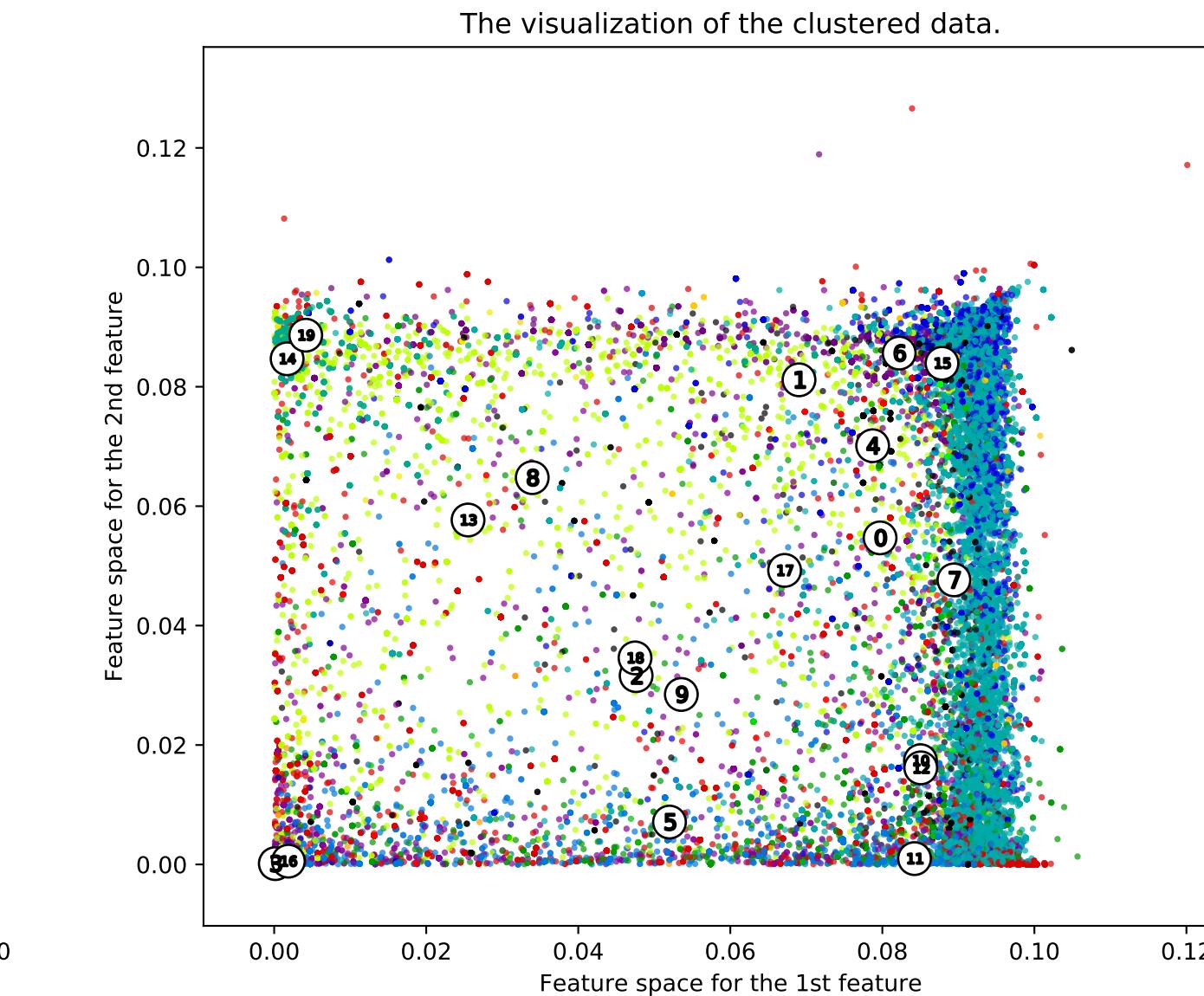
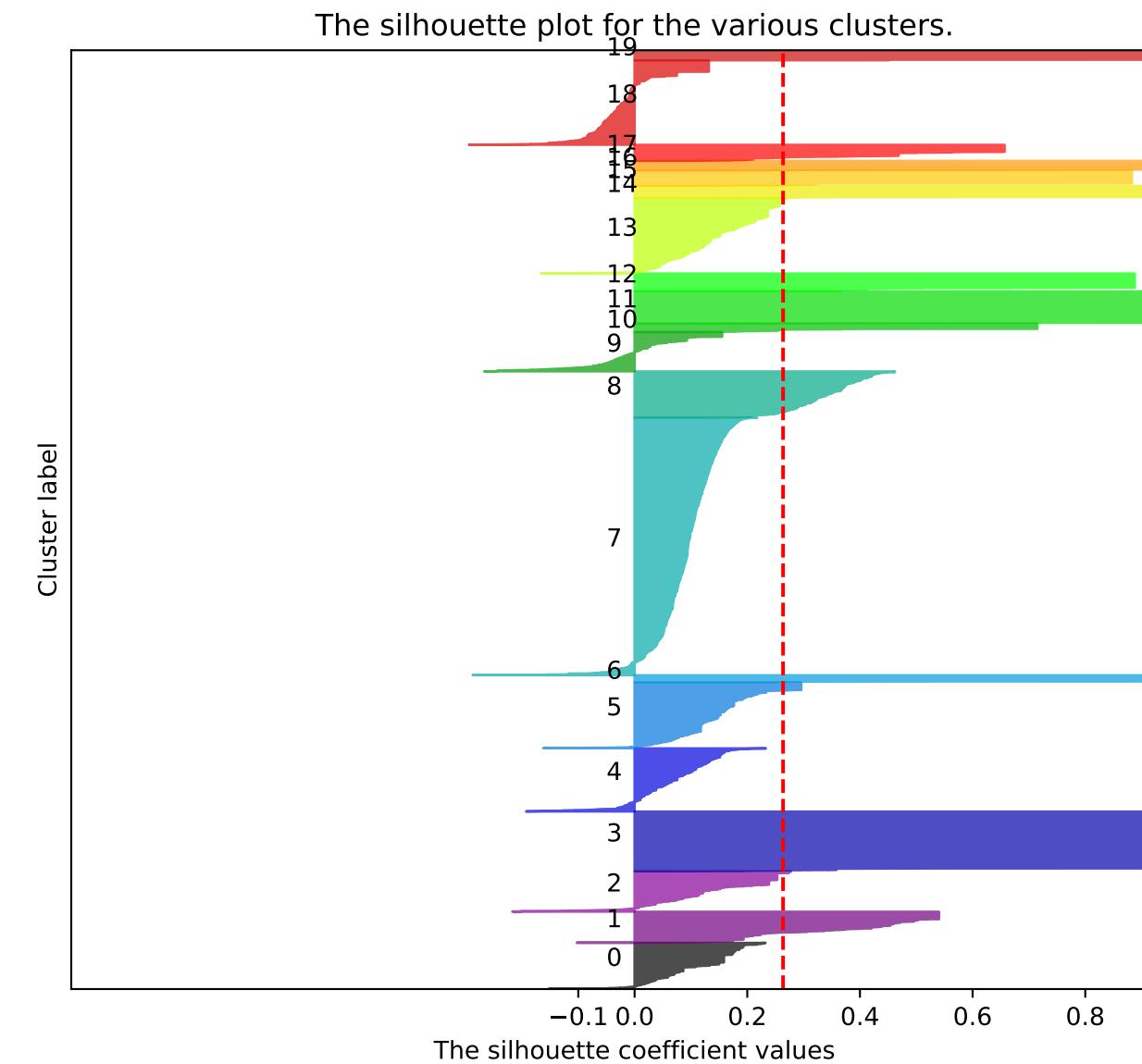
The silhouette plot for the various clusters.



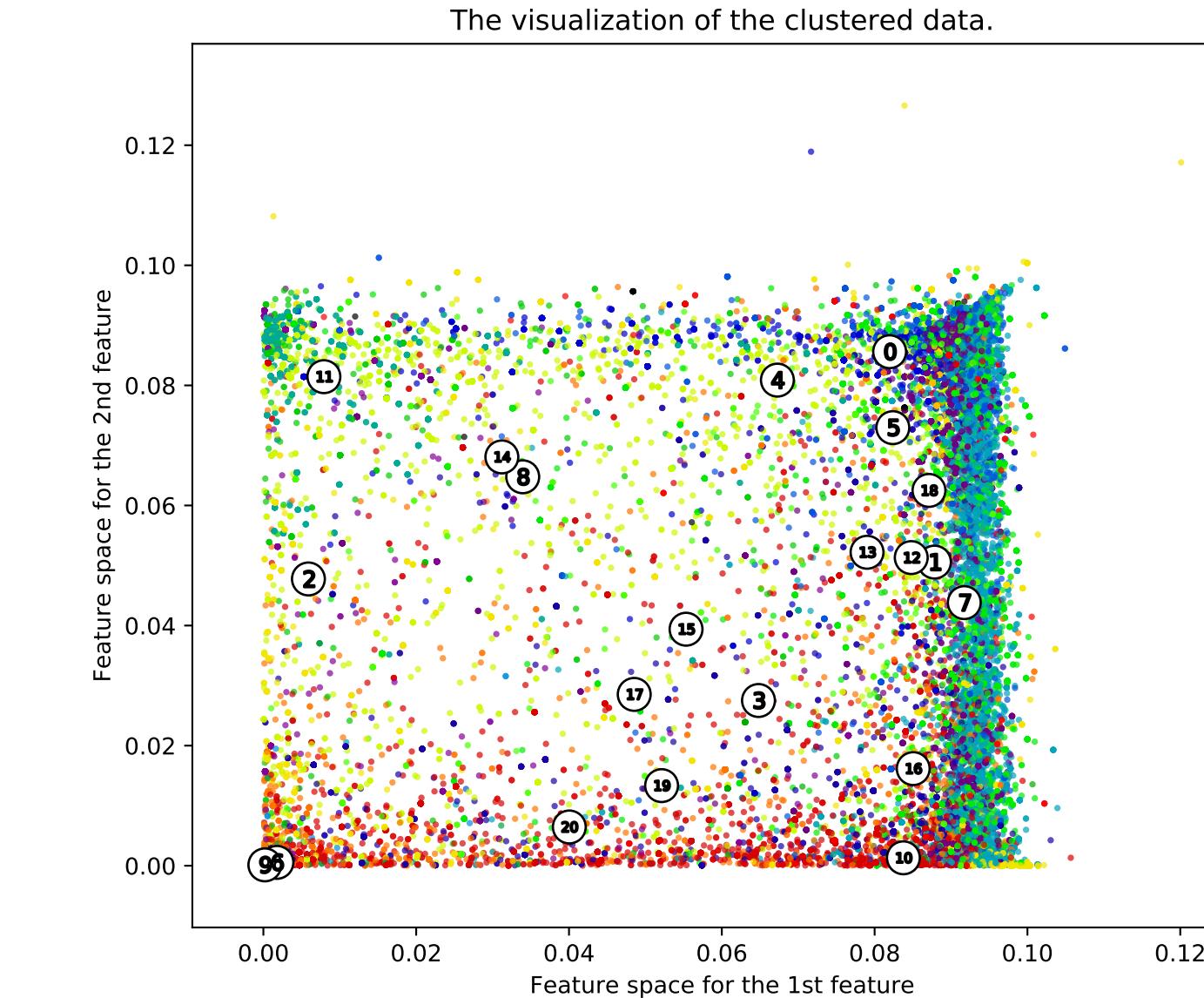
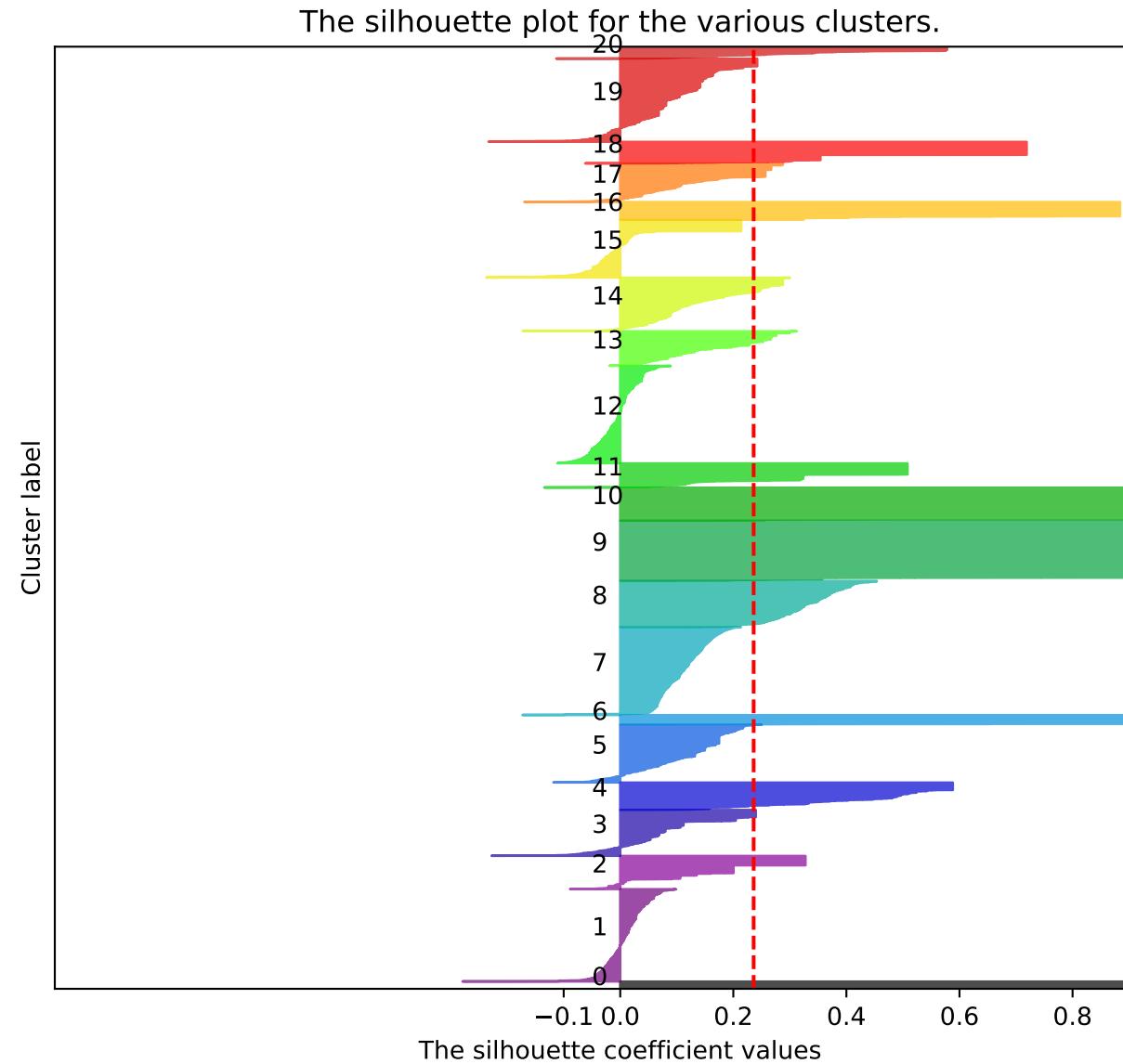
The visualization of the clustered data.



Silhouette analysis for KMeans clustering on sample data with n_clusters = 20 with Average Silhouette of: 0.26357734203338623

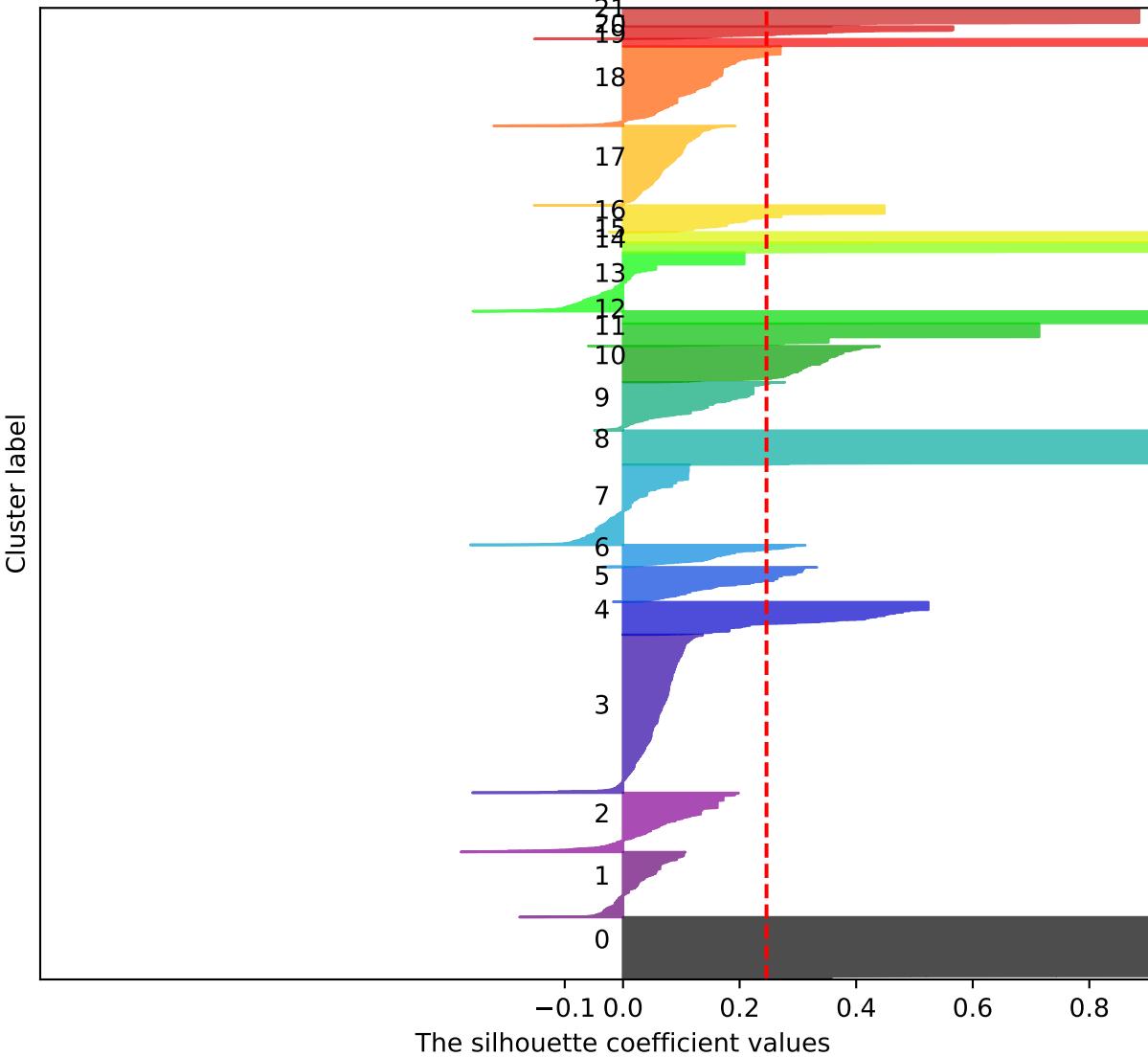


Silhouette analysis for KMeans clustering on sample data with n_clusters = 21 with Average Silhouette of: 0.23596858978271484

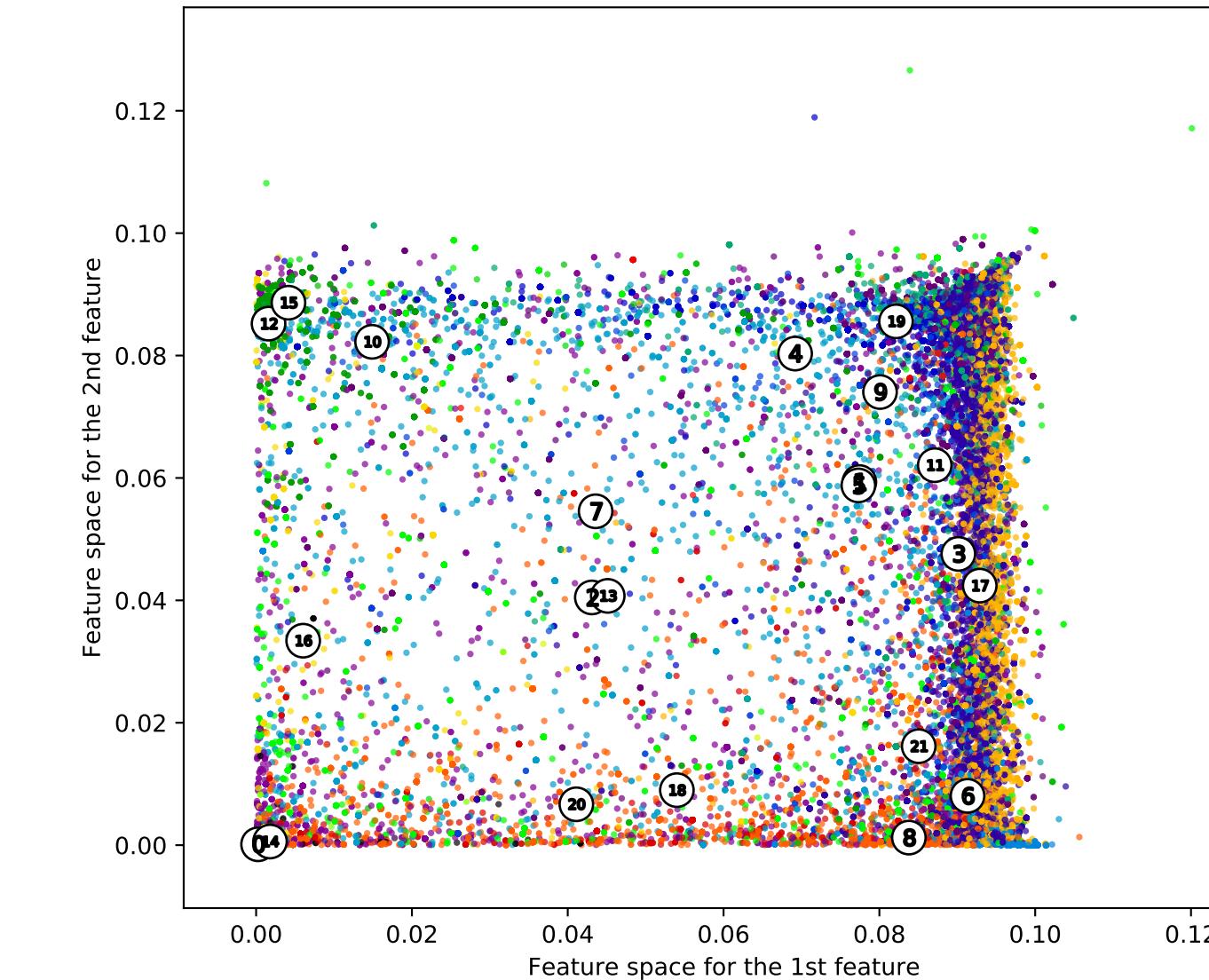


Silhouette analysis for KMeans clustering on sample data with n_clusters = 22 with Average Silhouette of: 0.24616090953350067

The silhouette plot for the various clusters

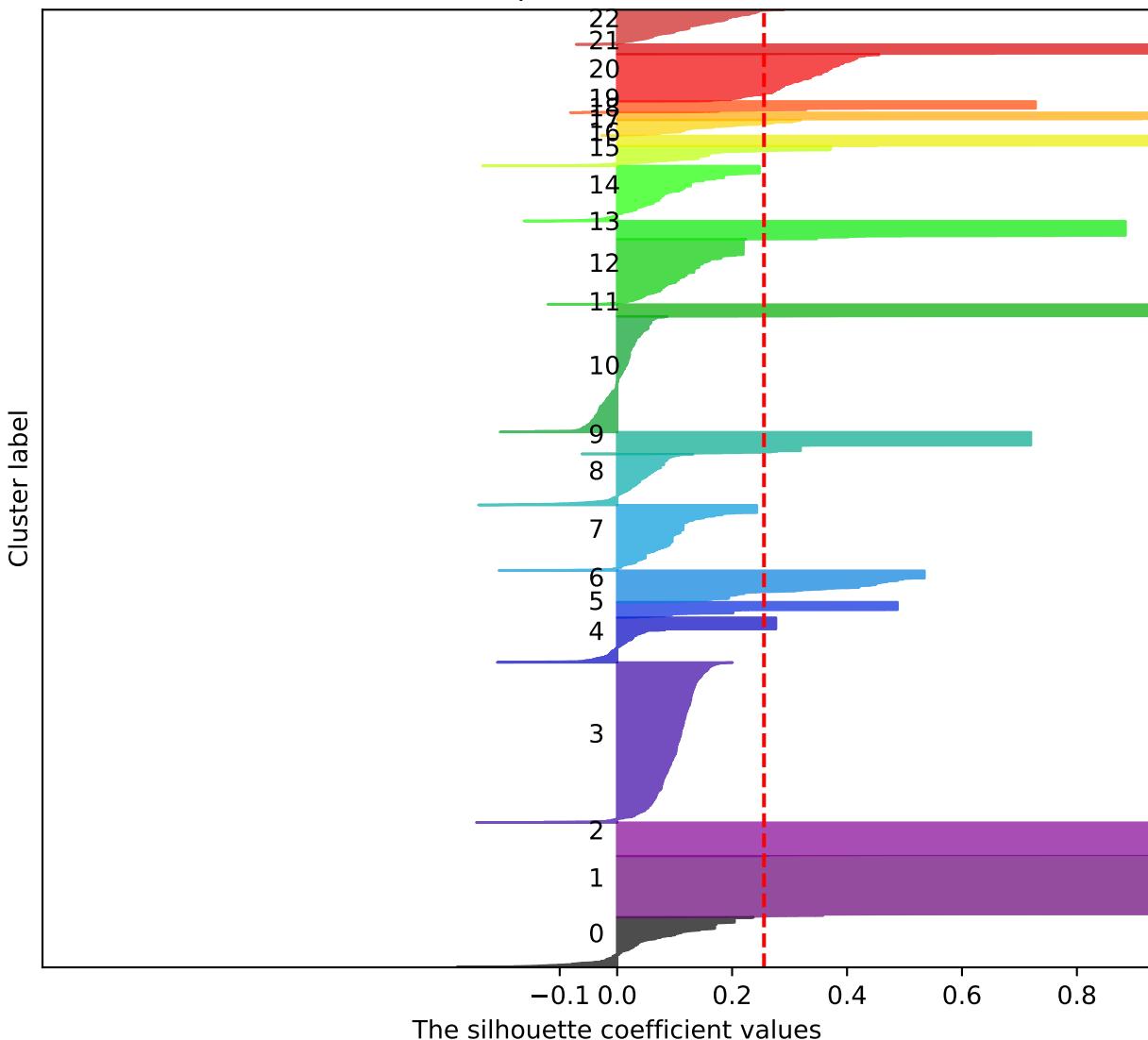


The visualization of the clustered data

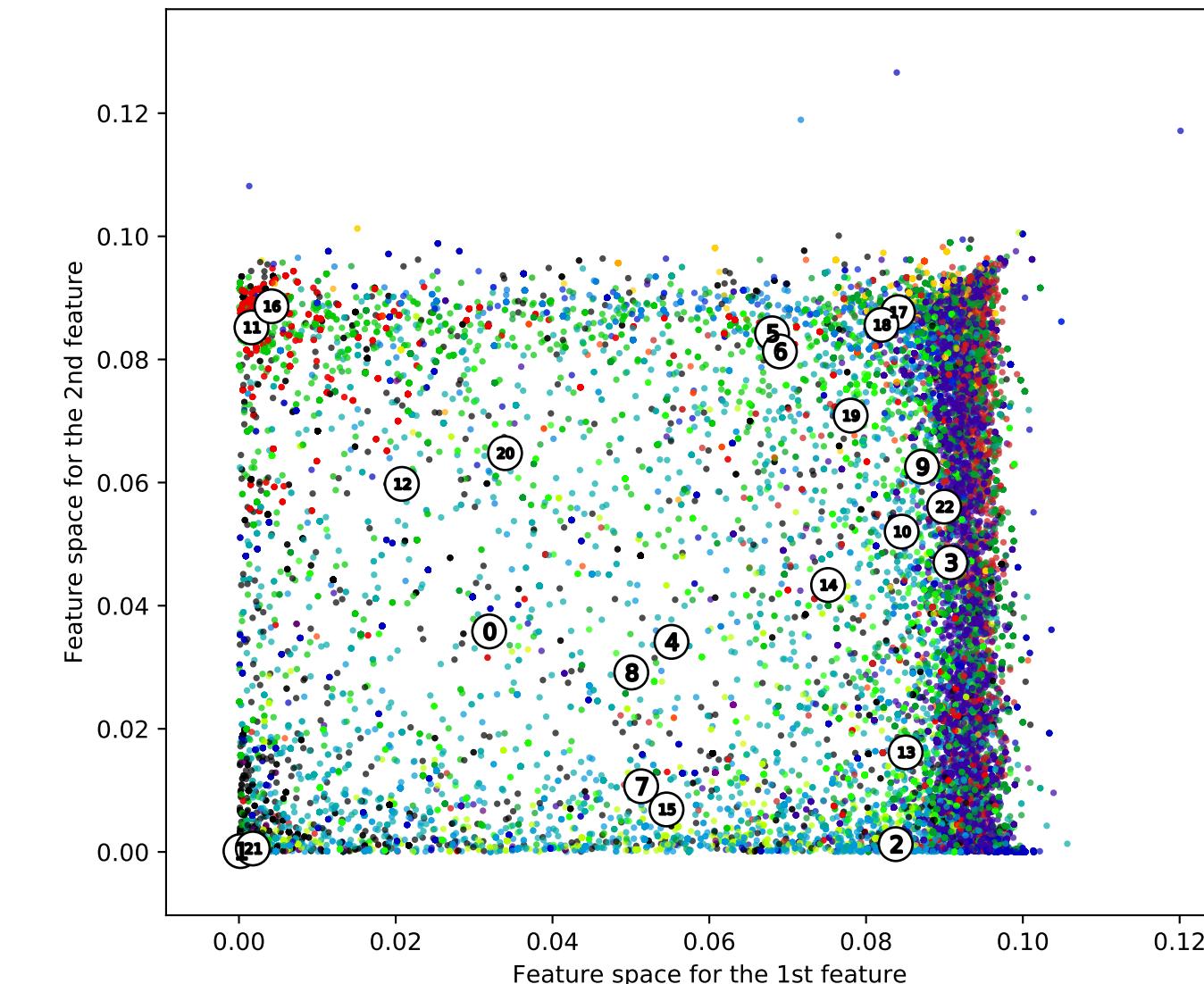


Silhouette analysis for KMeans clustering on sample data with n_clusters = 23 with Average Silhouette of: 0.2555036246776581

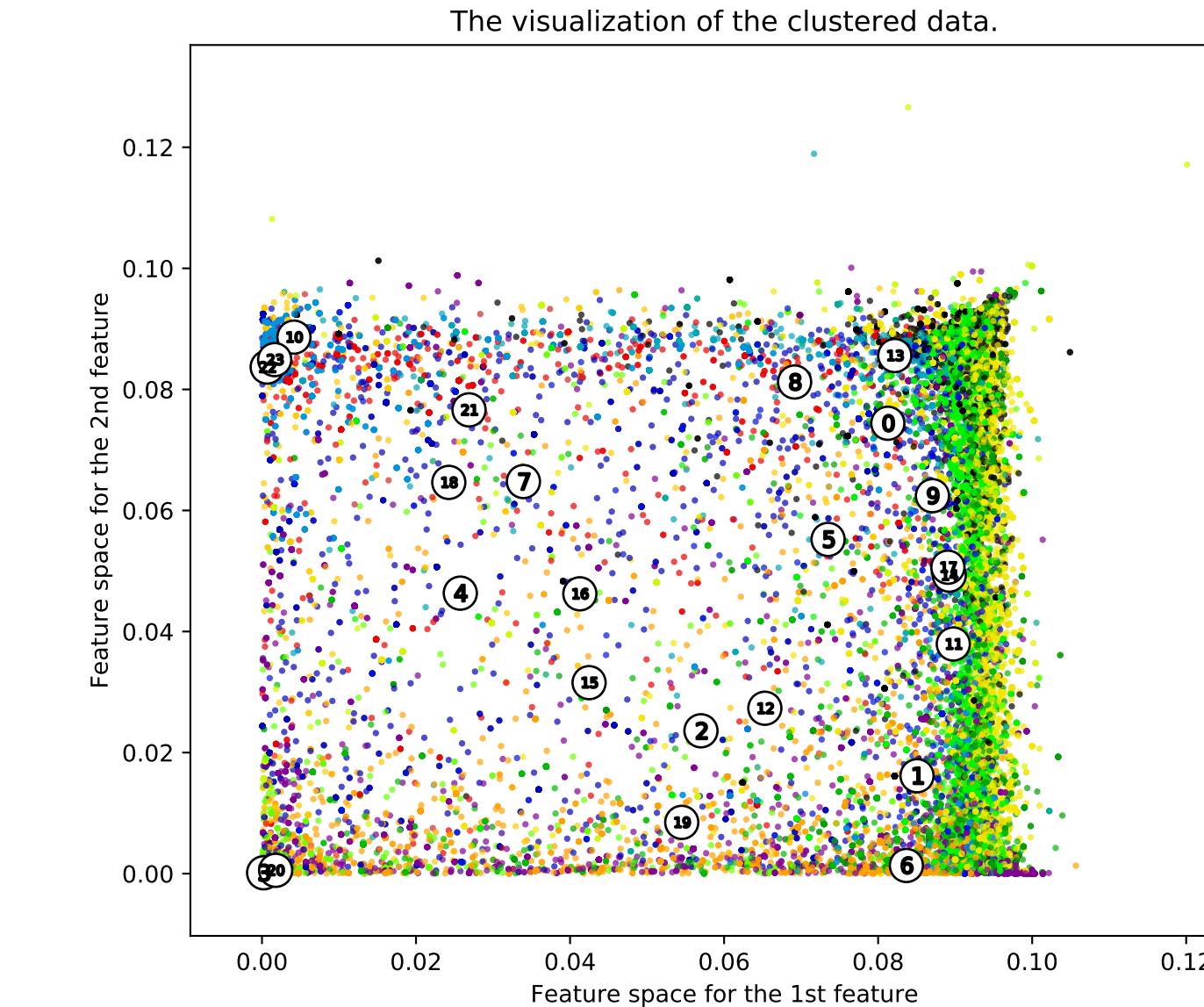
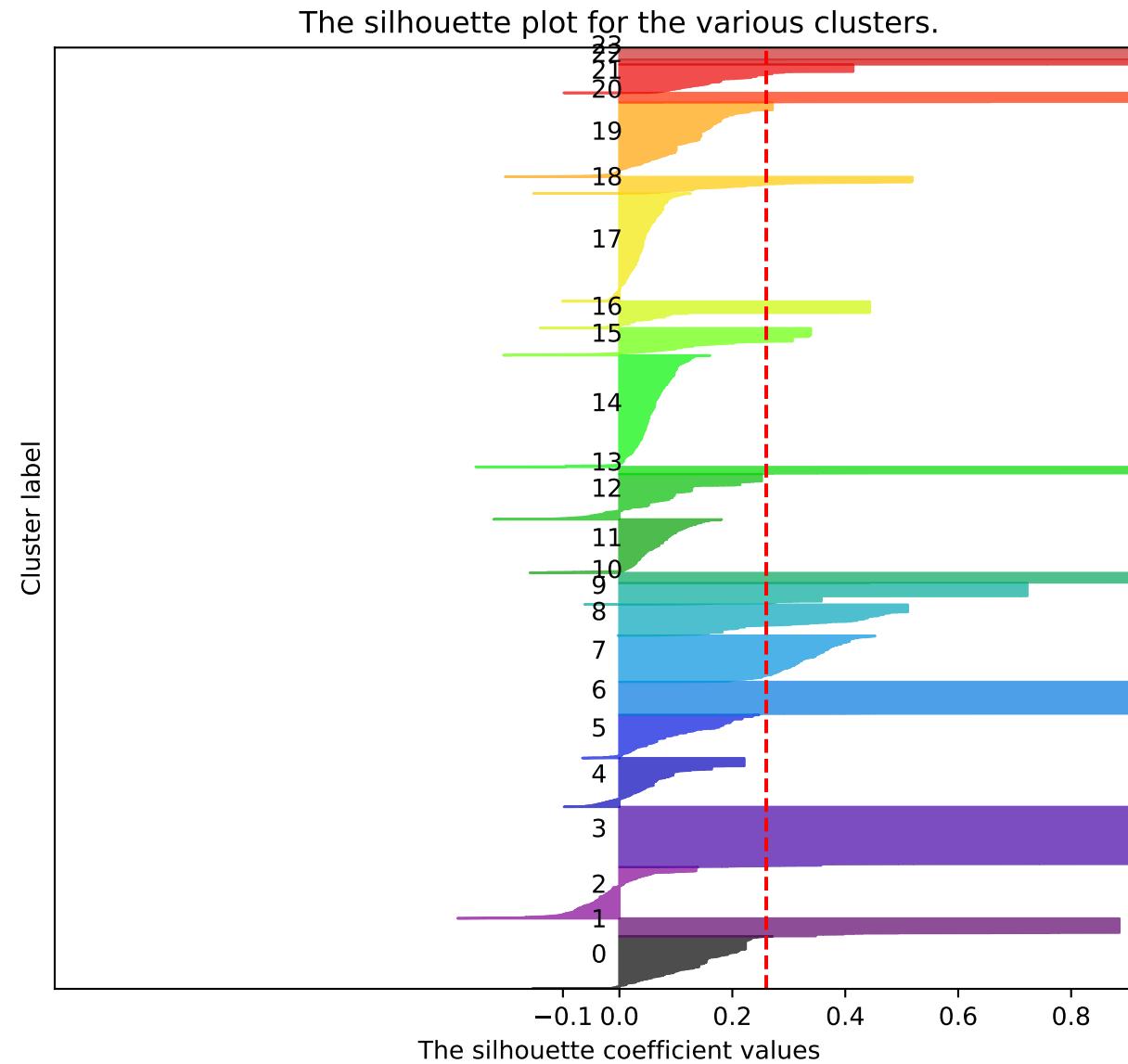
The silhouette plot for the various clusters.



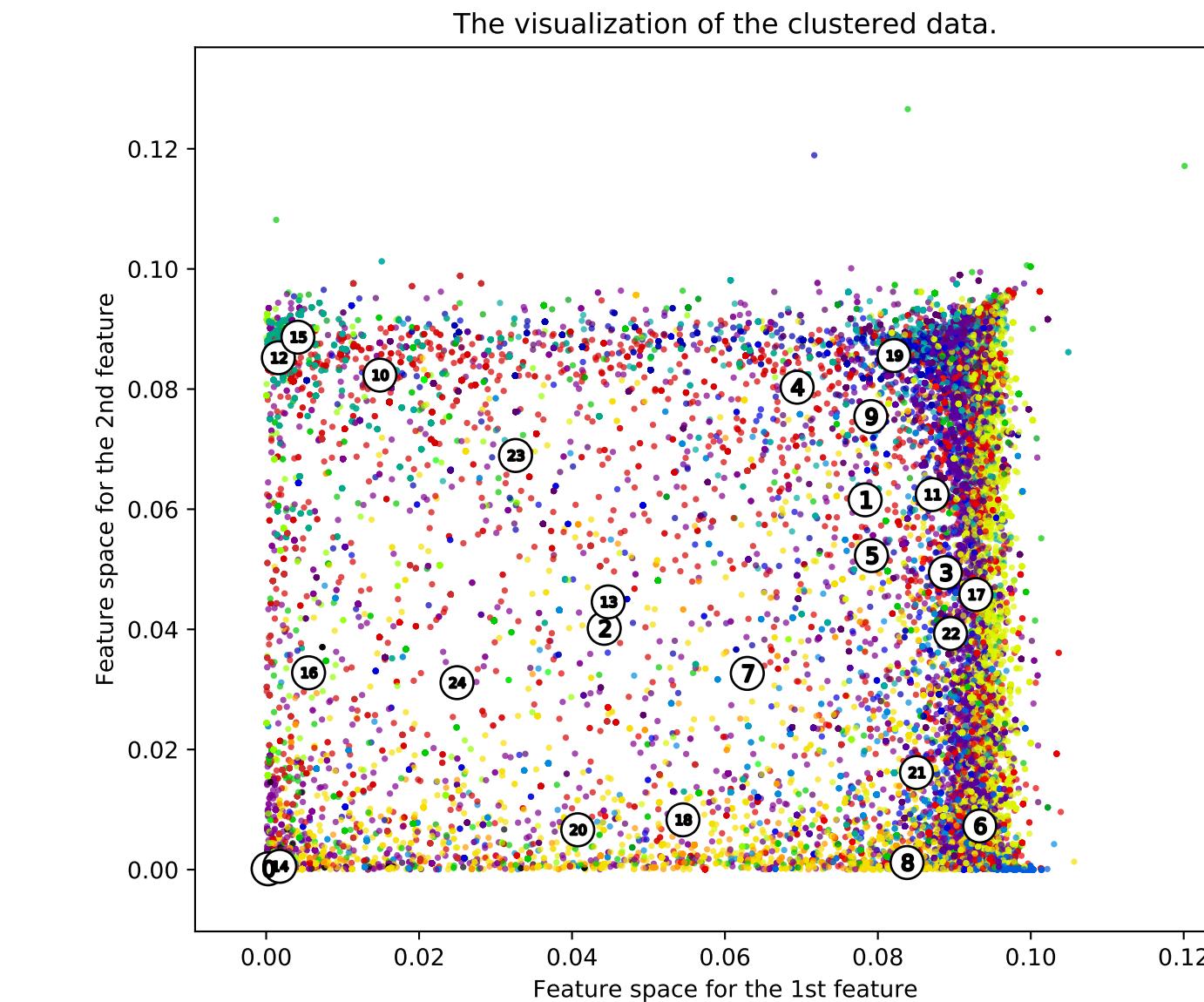
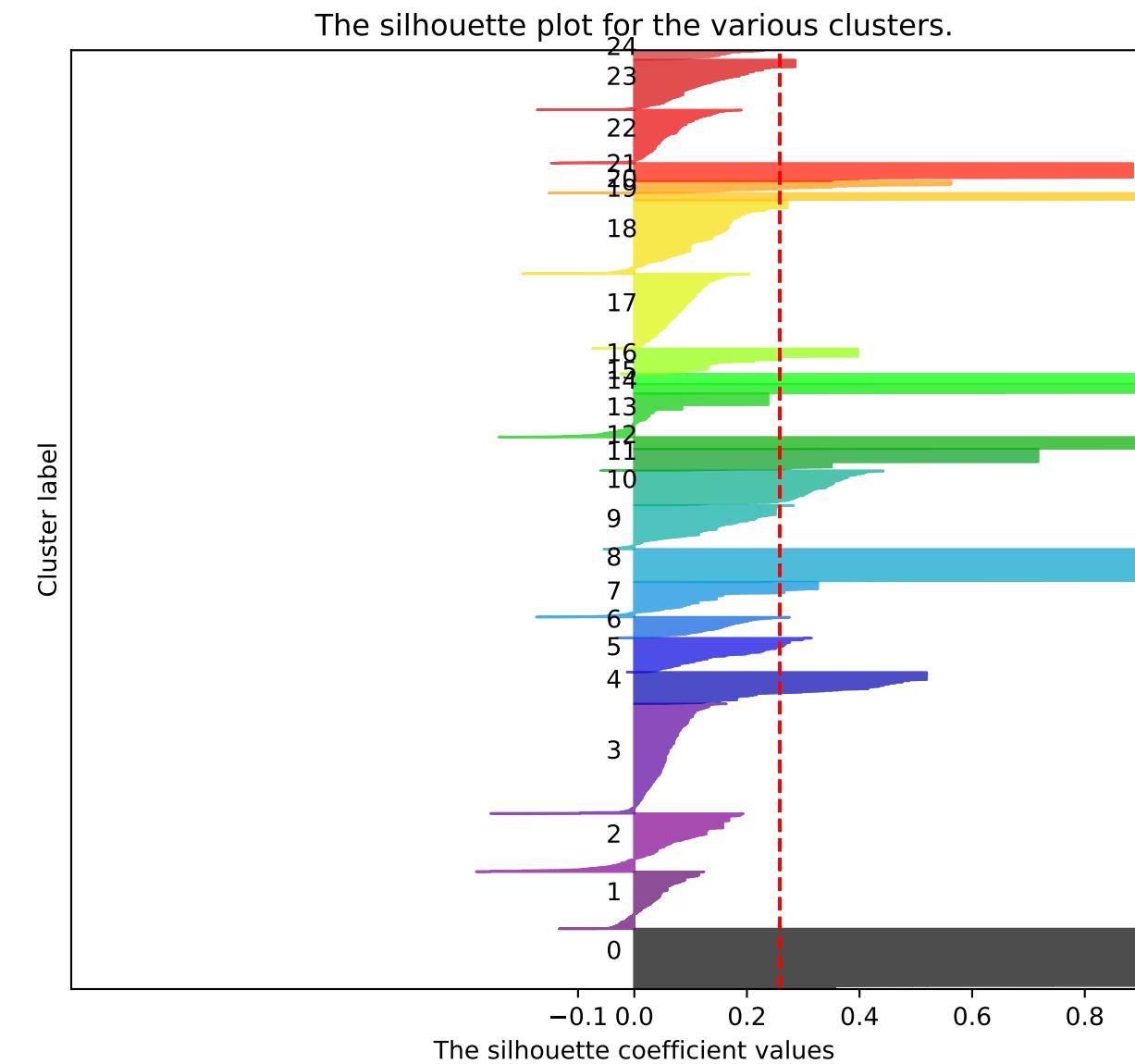
The visualization of the clustered data.



Silhouette analysis for KMeans clustering on sample data with n_clusters = 24 with Average Silhouette of: 0.26007702946662903

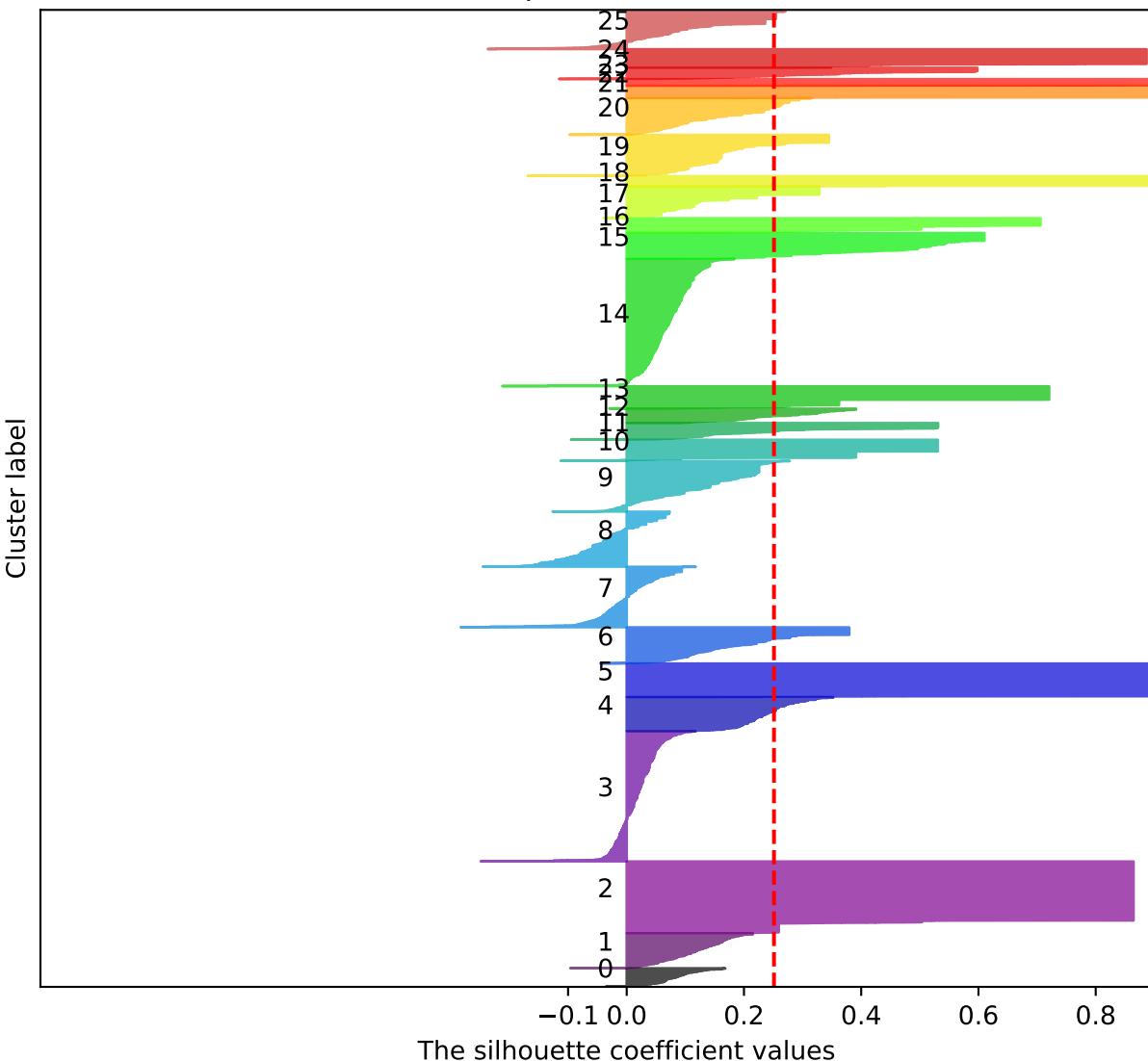


Silhouette analysis for KMeans clustering on sample data with n_clusters = 25 with Average Silhouette of: 0.25839635729789734

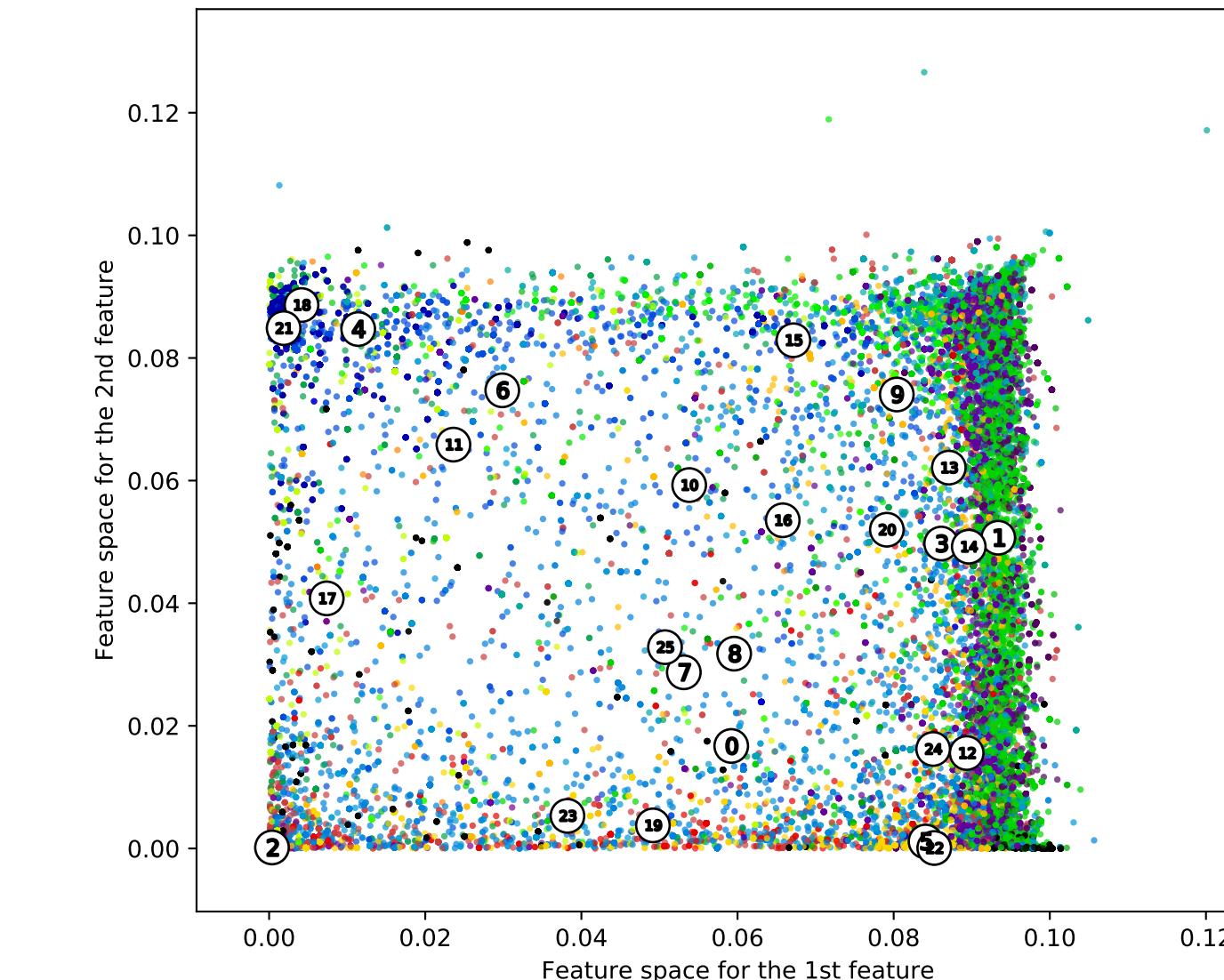


Silhouette analysis for KMeans clustering on sample data with n_clusters = 26 with Average Silhouette of: 0.251205712556839

The silhouette plot for the various clusters.

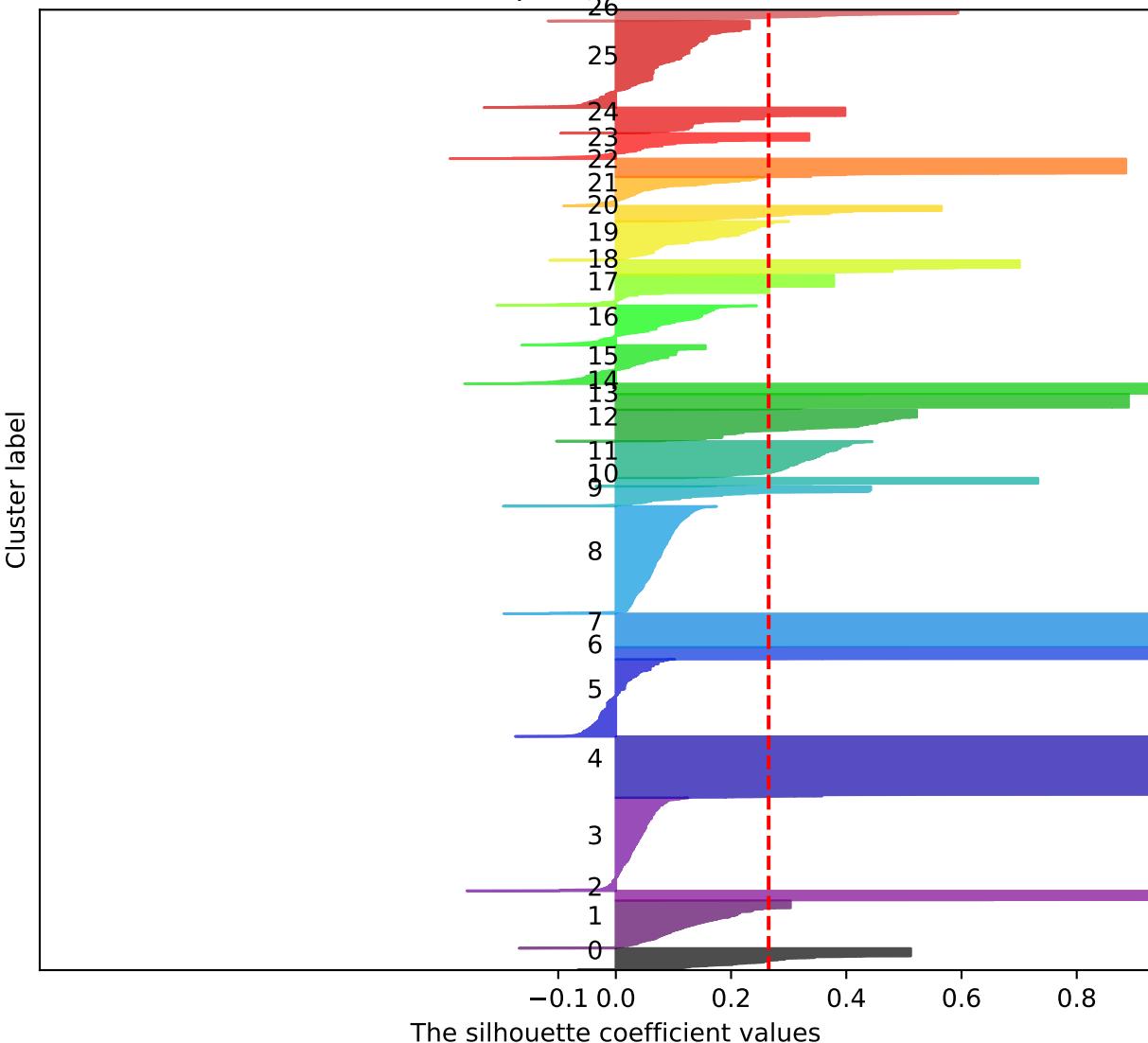


The visualization of the clustered data.

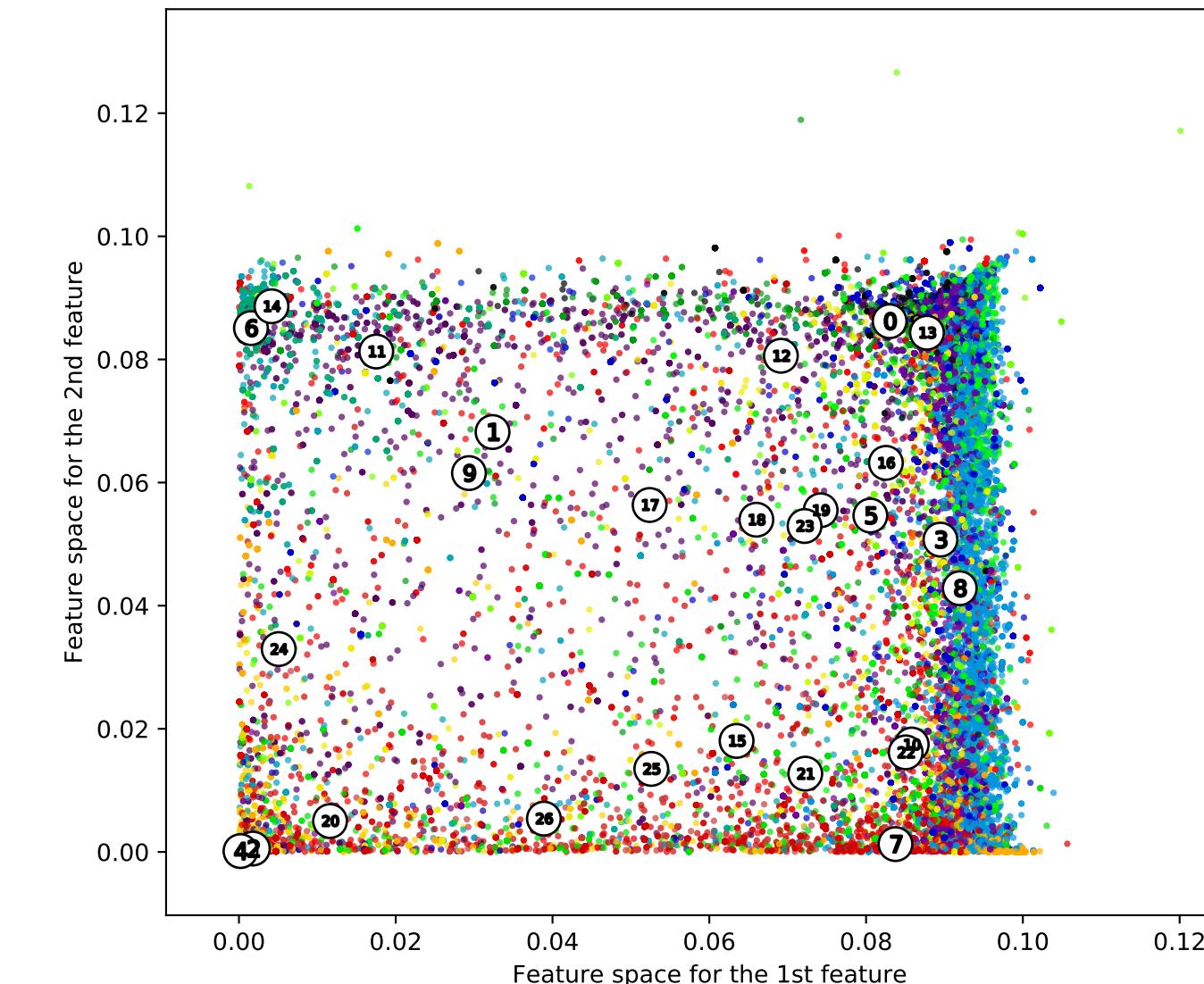


Silhouette analysis for KMeans clustering on sample data with n_clusters = 27 with Average Silhouette of: 0.2652665674686432

The silhouette plot for the various clusters.

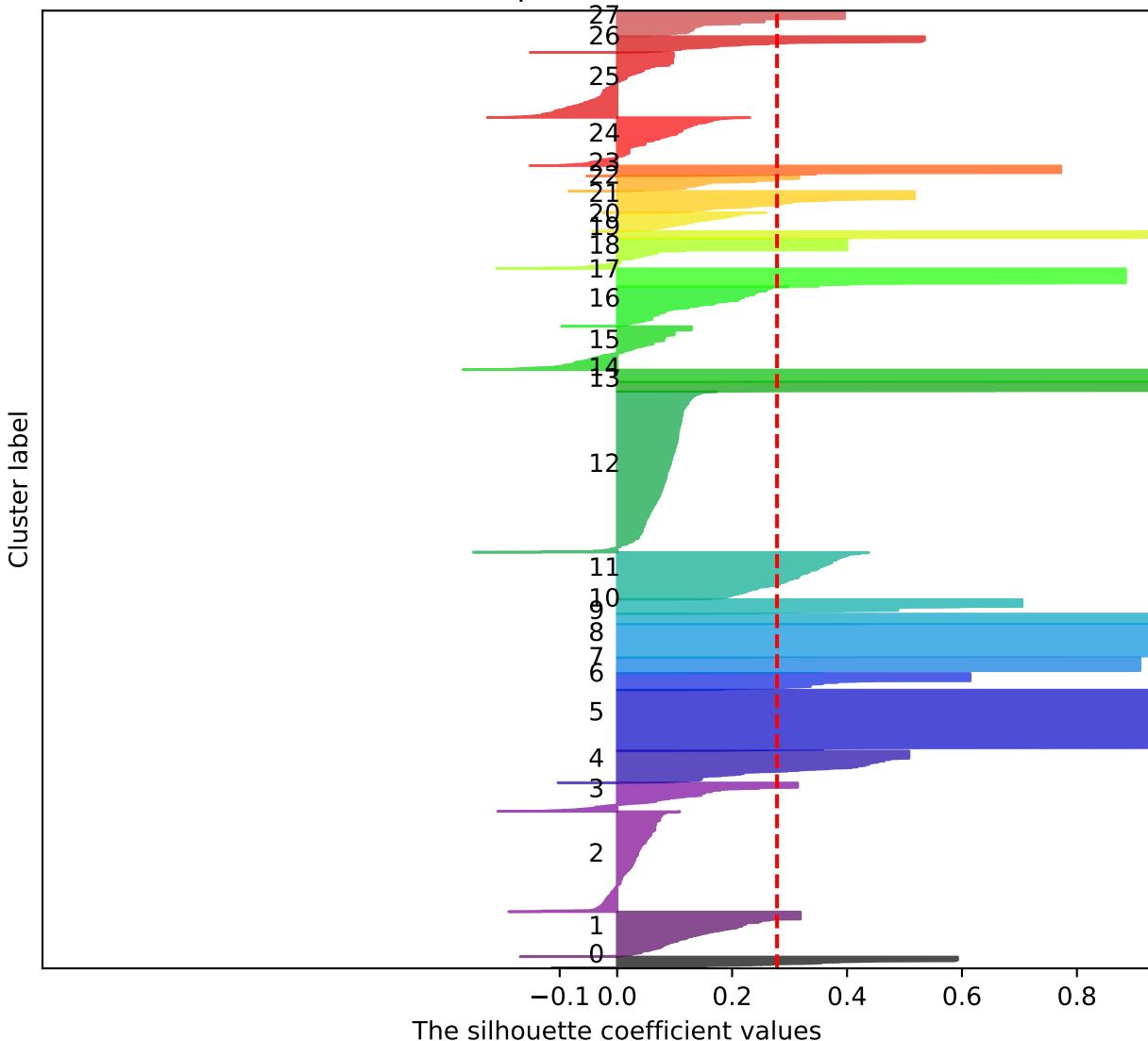


The visualization of the clustered data.

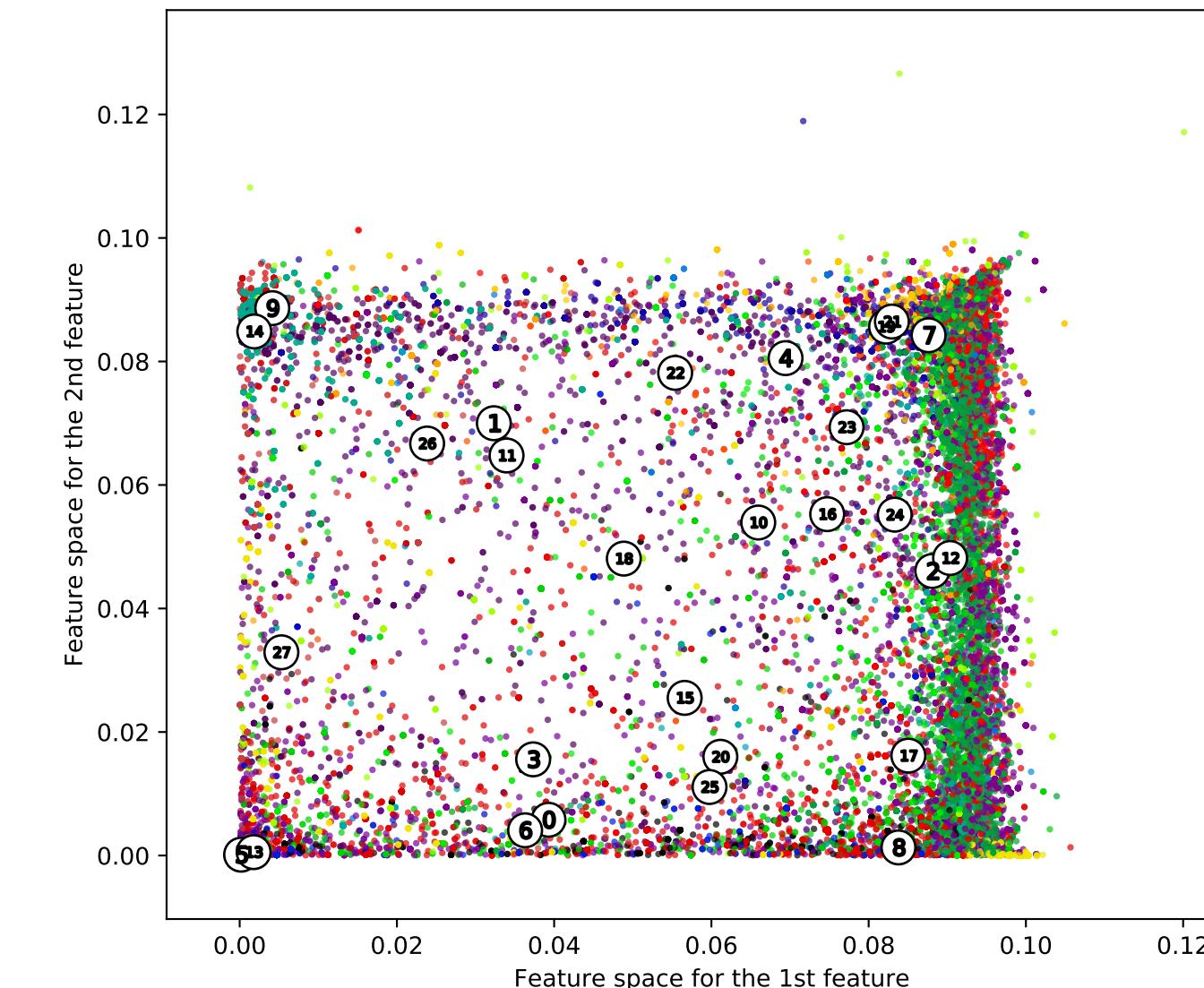


Silhouette analysis for KMeans clustering on sample data with n_clusters = 28 with Average Silhouette of: 0.2781623601913452

The silhouette plot for the various clusters.

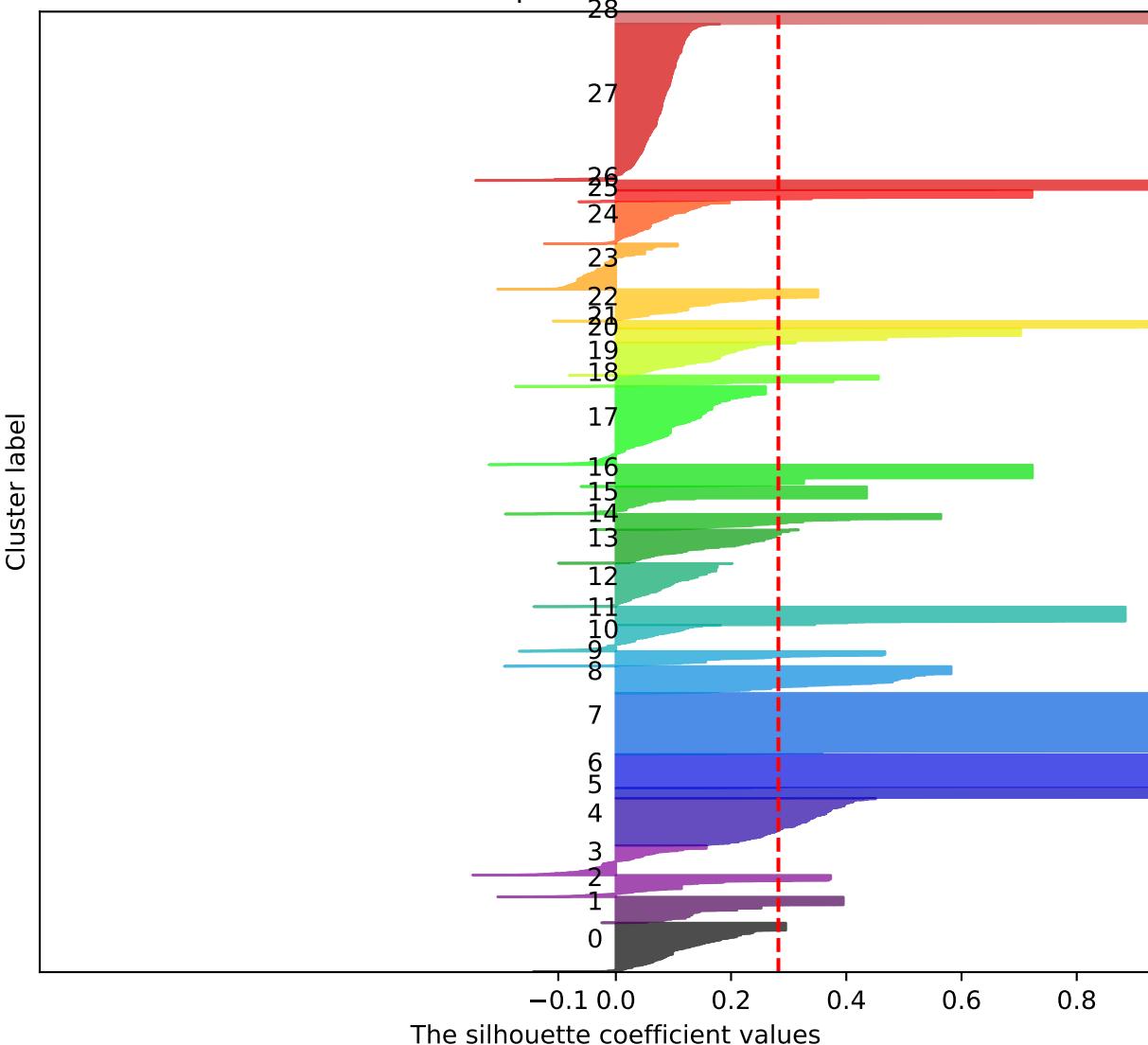


The visualization of the clustered data.

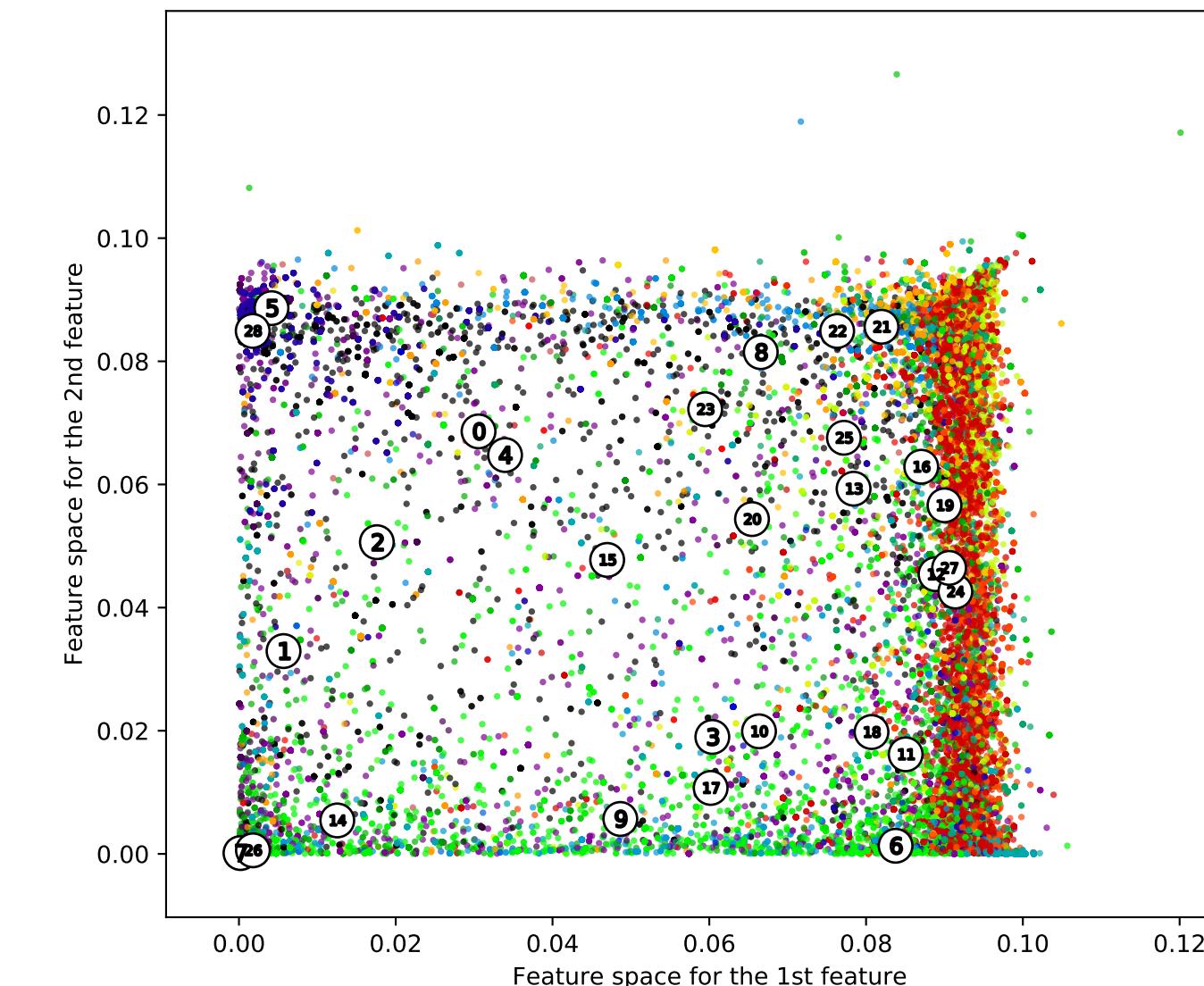


Silhouette analysis for KMeans clustering on sample data with n_clusters = 29 with Average Silhouette of: 0.2821710407733917

The silhouette plot for the various clusters.

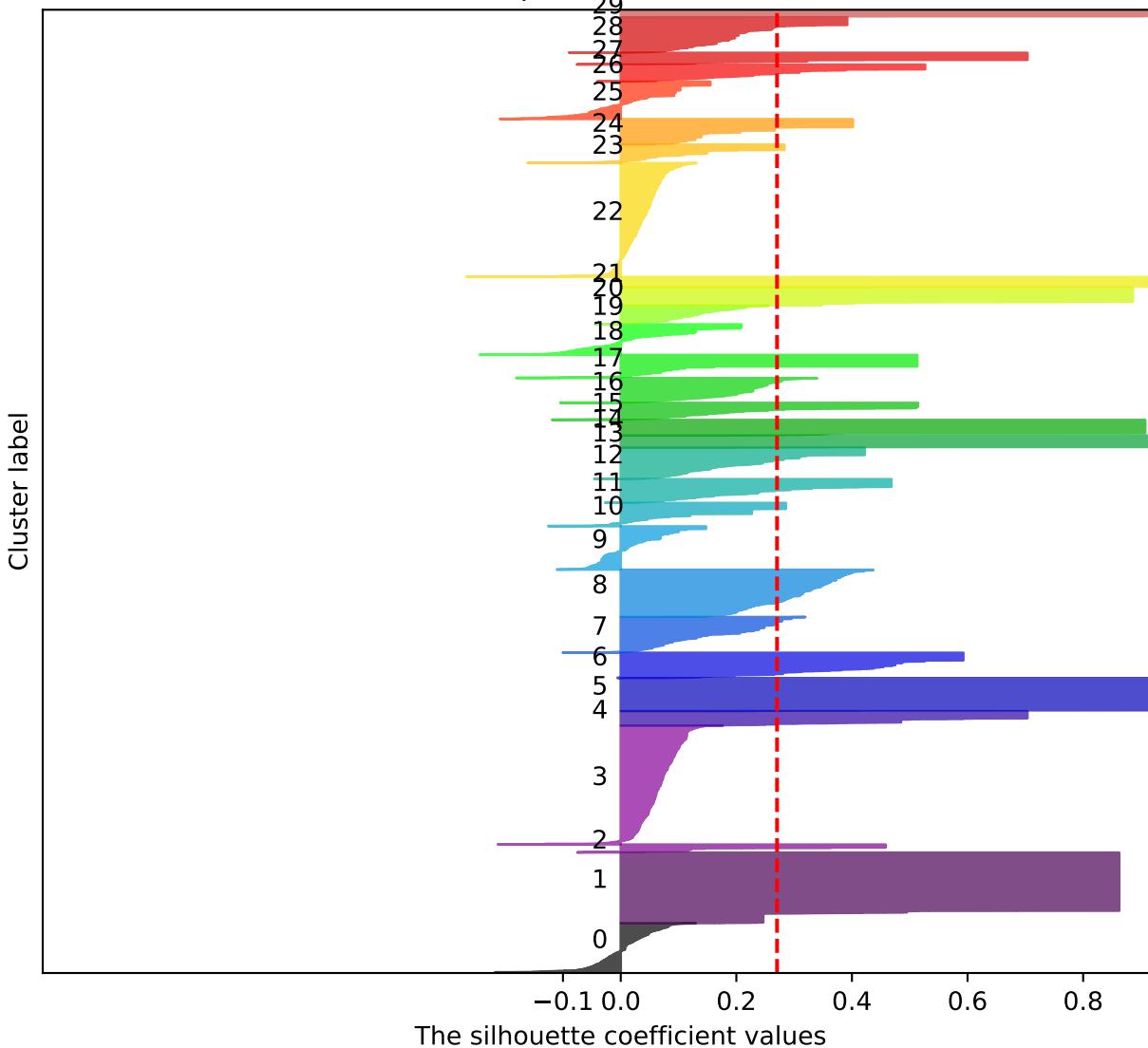


The visualization of the clustered data.

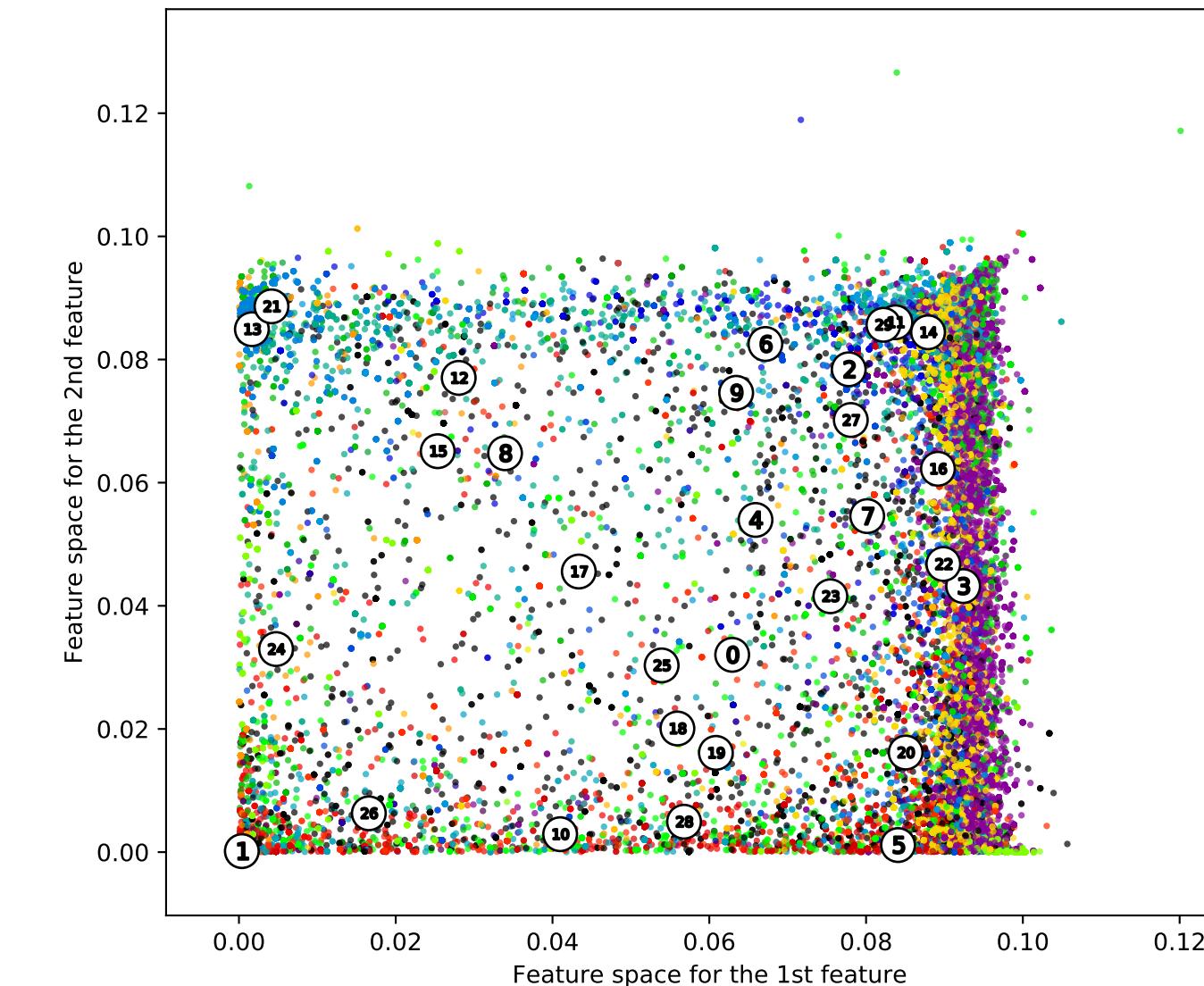


Silhouette analysis for KMeans clustering on sample data with n_clusters = 30 with Average Silhouette of: 0.2704324424266815

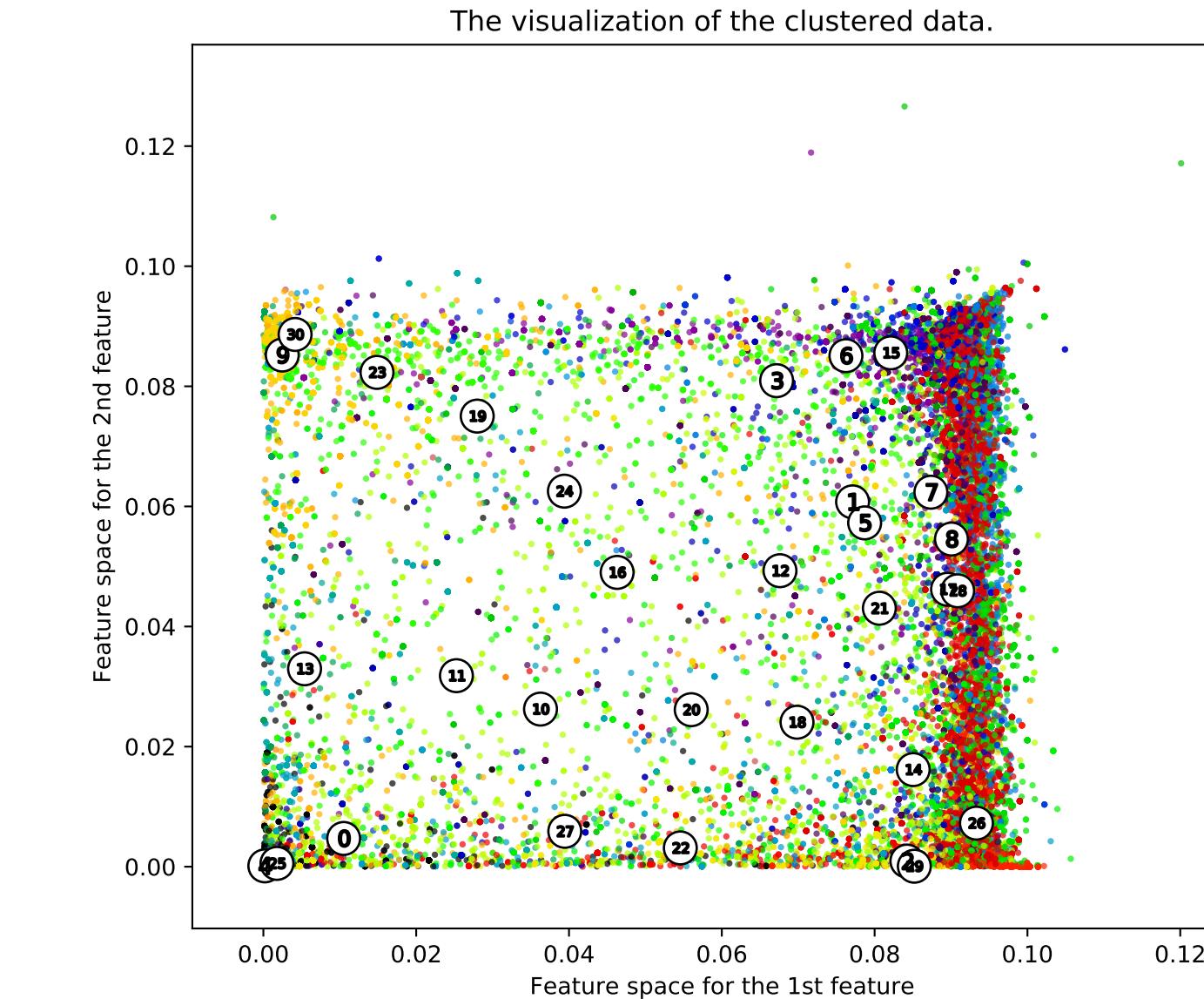
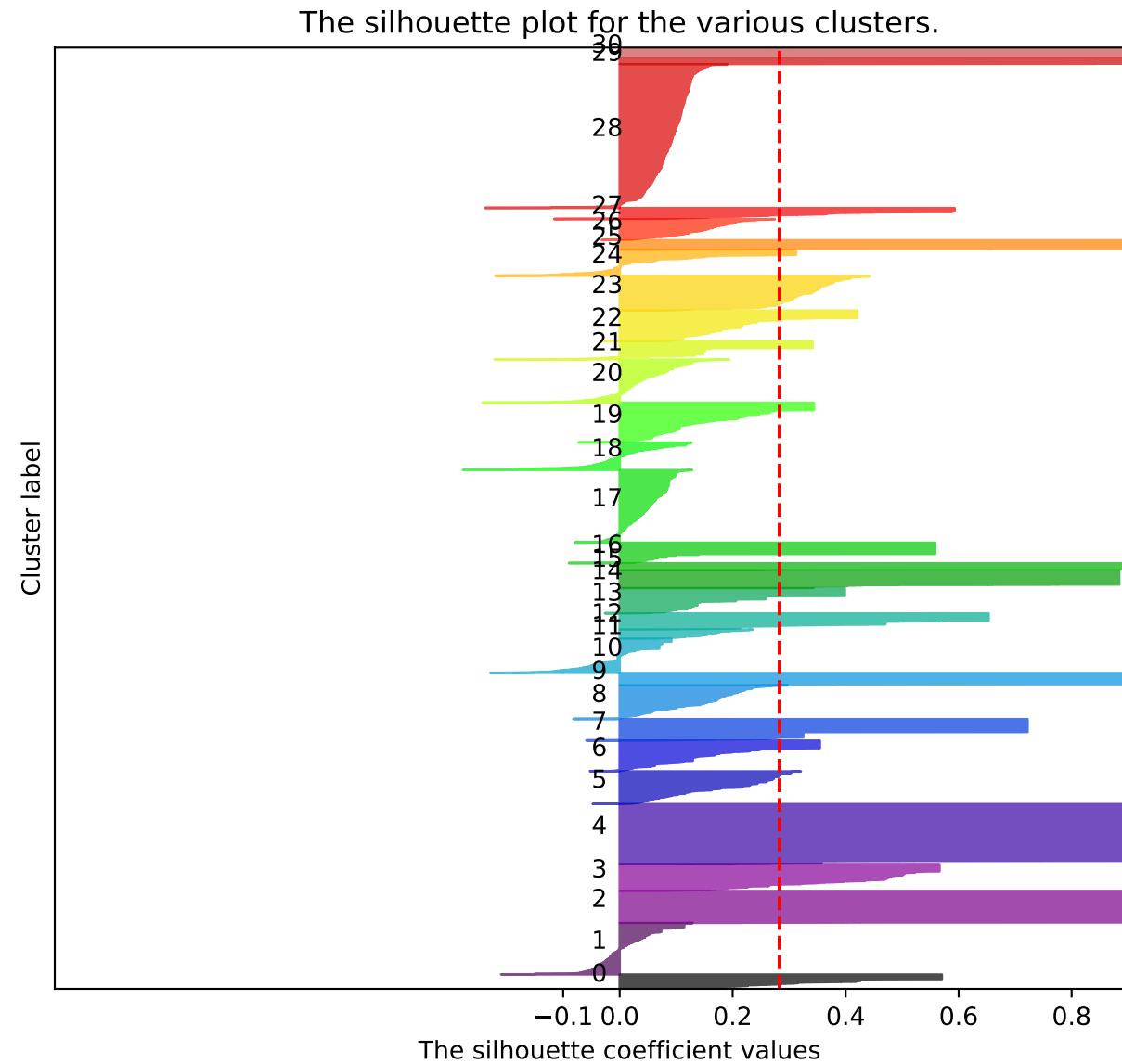
The silhouette plot for the various clusters.



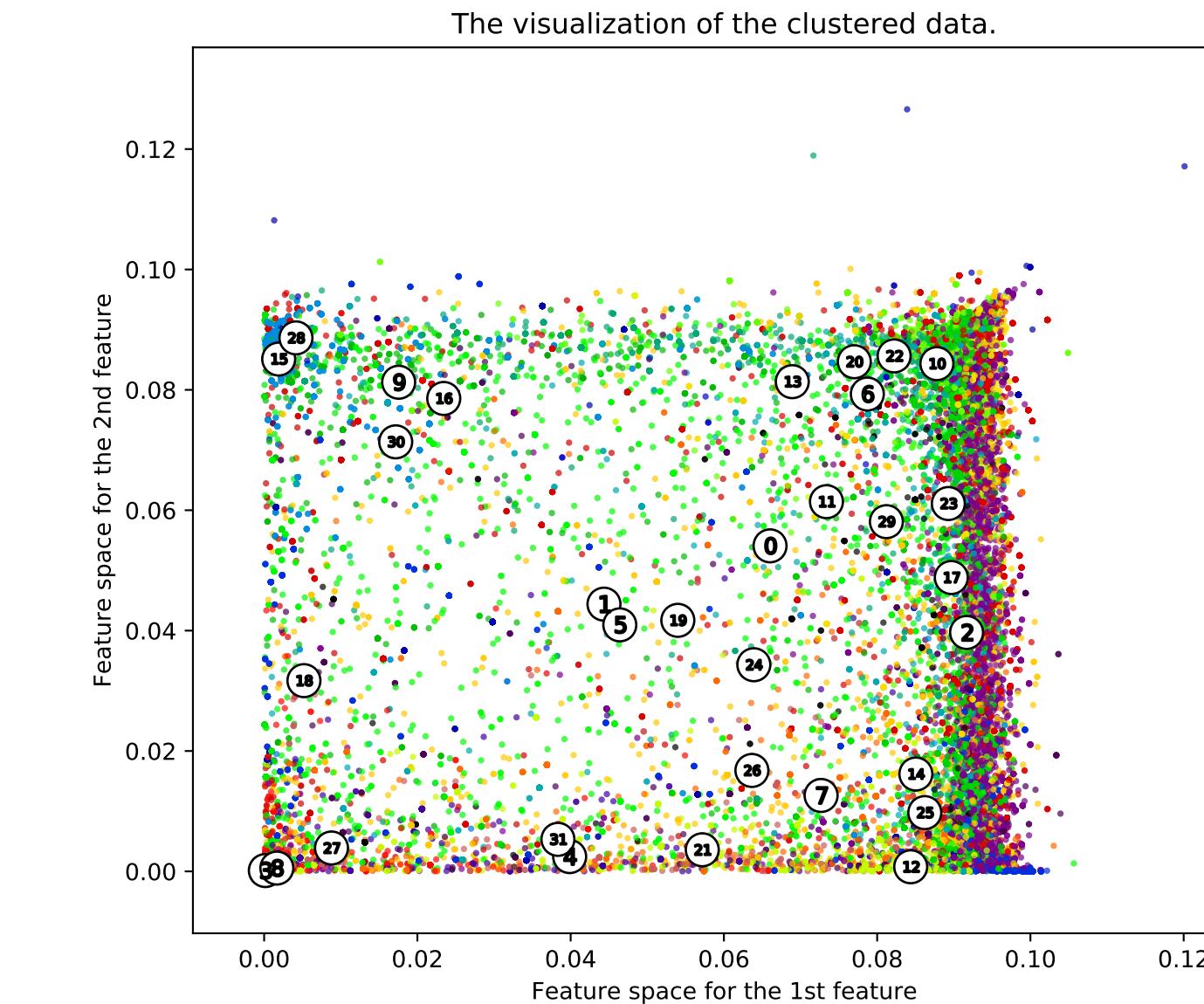
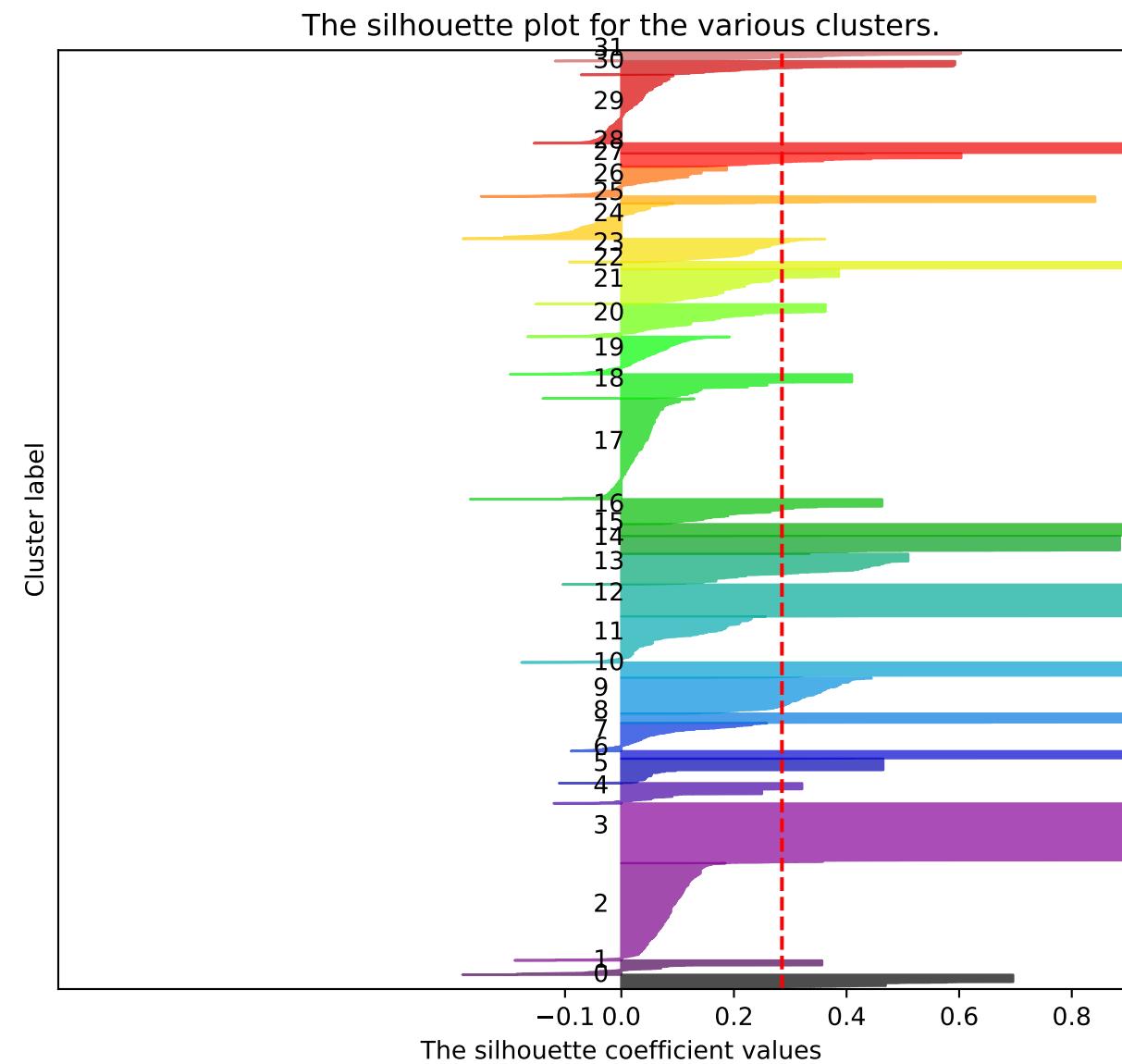
The visualization of the clustered data.



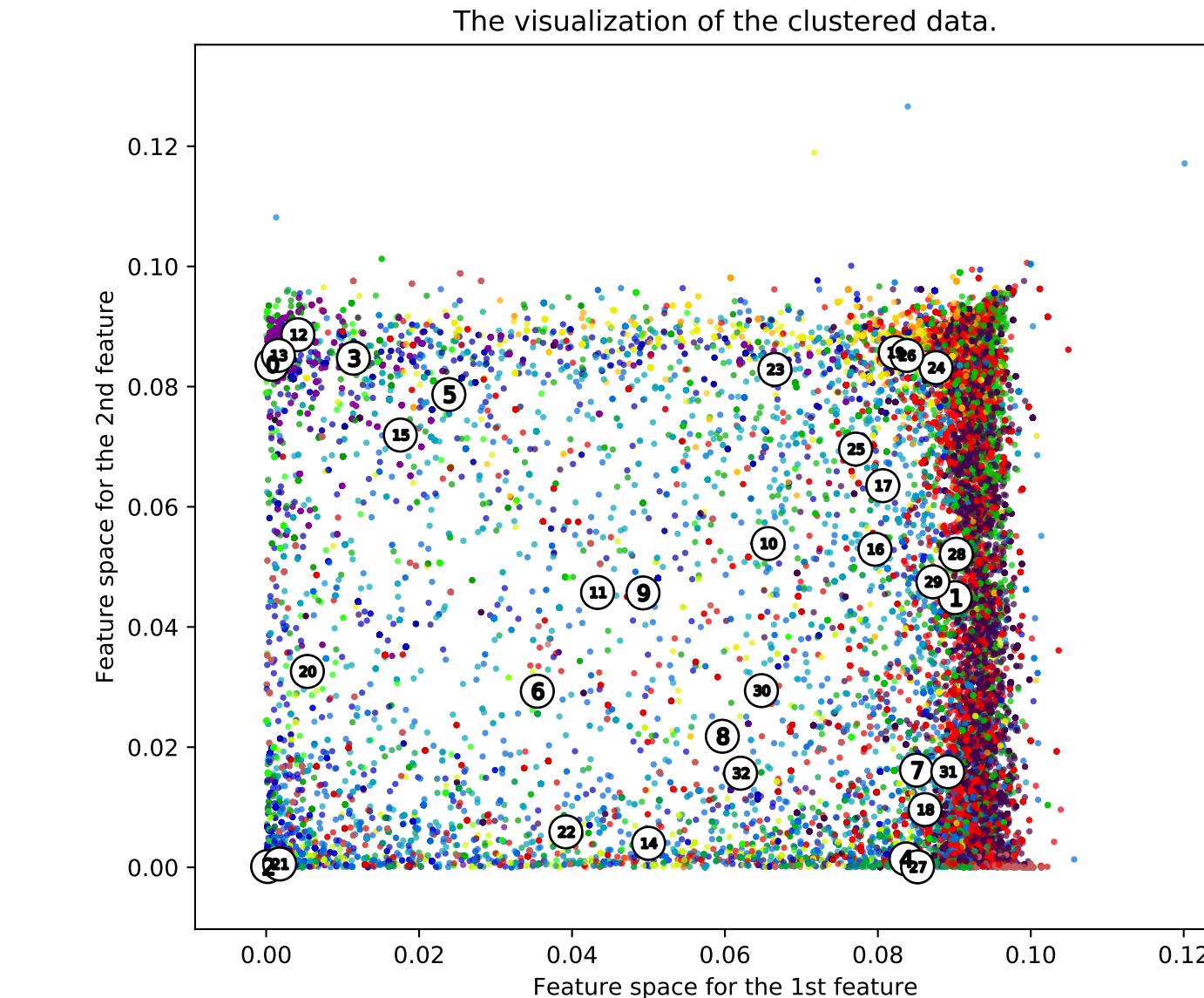
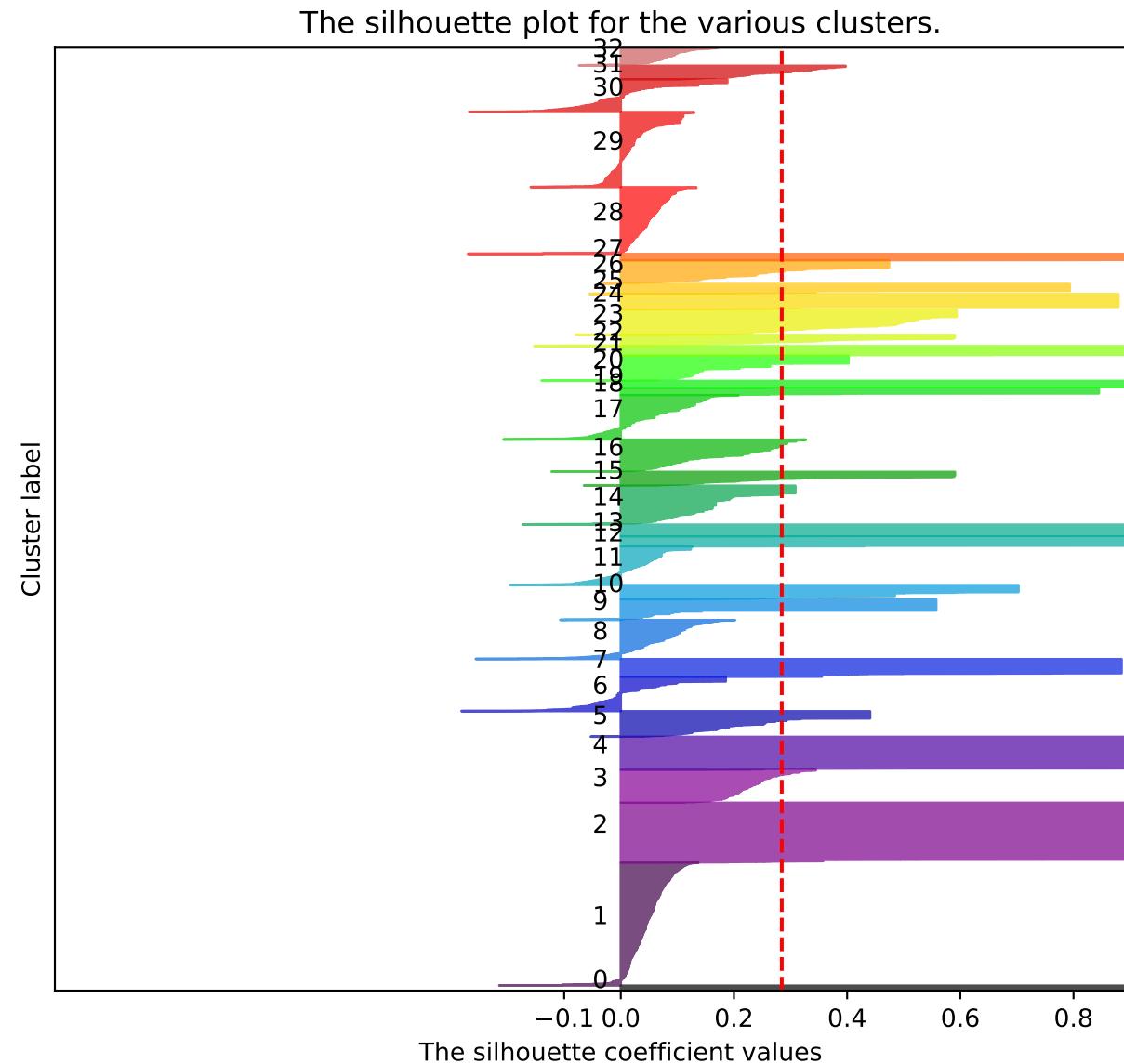
Silhouette analysis for KMeans clustering on sample data with n_clusters = 31 with Average Silhouette of: 0.28299883008003235



Silhouette analysis for KMeans clustering on sample data with n_clusters = 32 with Average Silhouette of: 0.2852296531200409

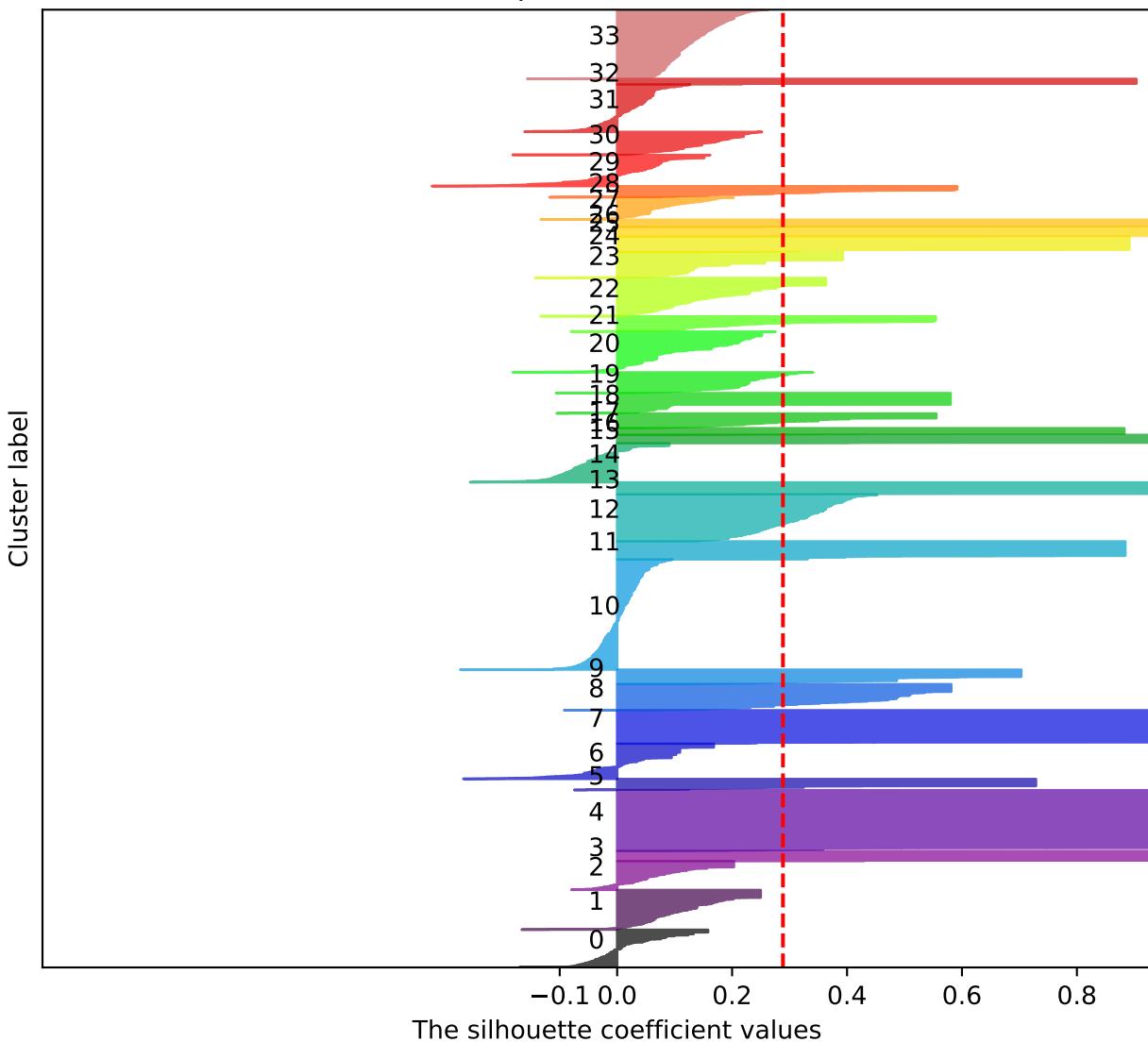


Silhouette analysis for KMeans clustering on sample data with n_clusters = 33 with Average Silhouette of: 0.28451627492904663

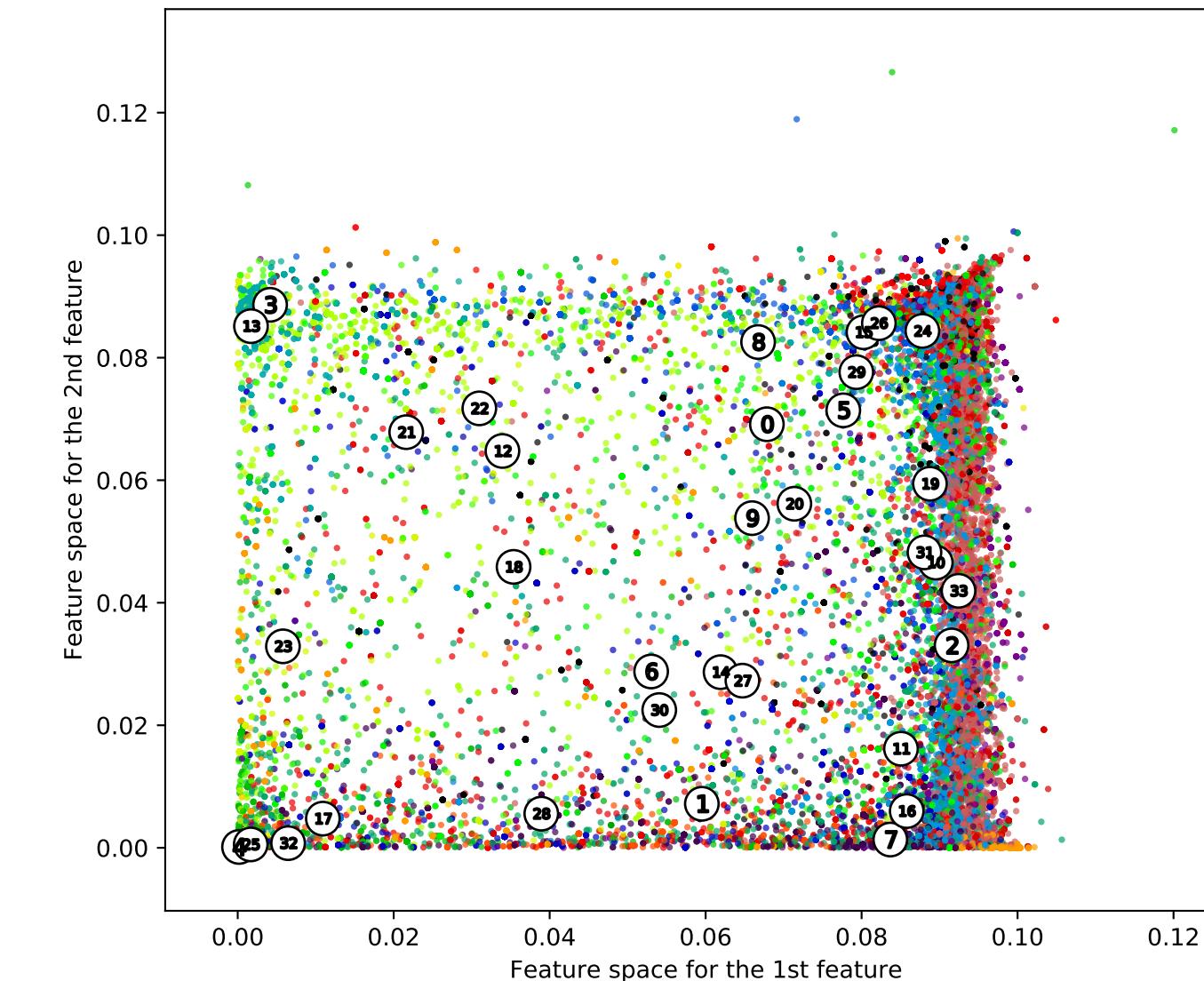


Silhouette analysis for KMeans clustering on sample data with n_clusters = 34 with Average Silhouette of: 0.2884506583213806

The silhouette plot for the various clusters.

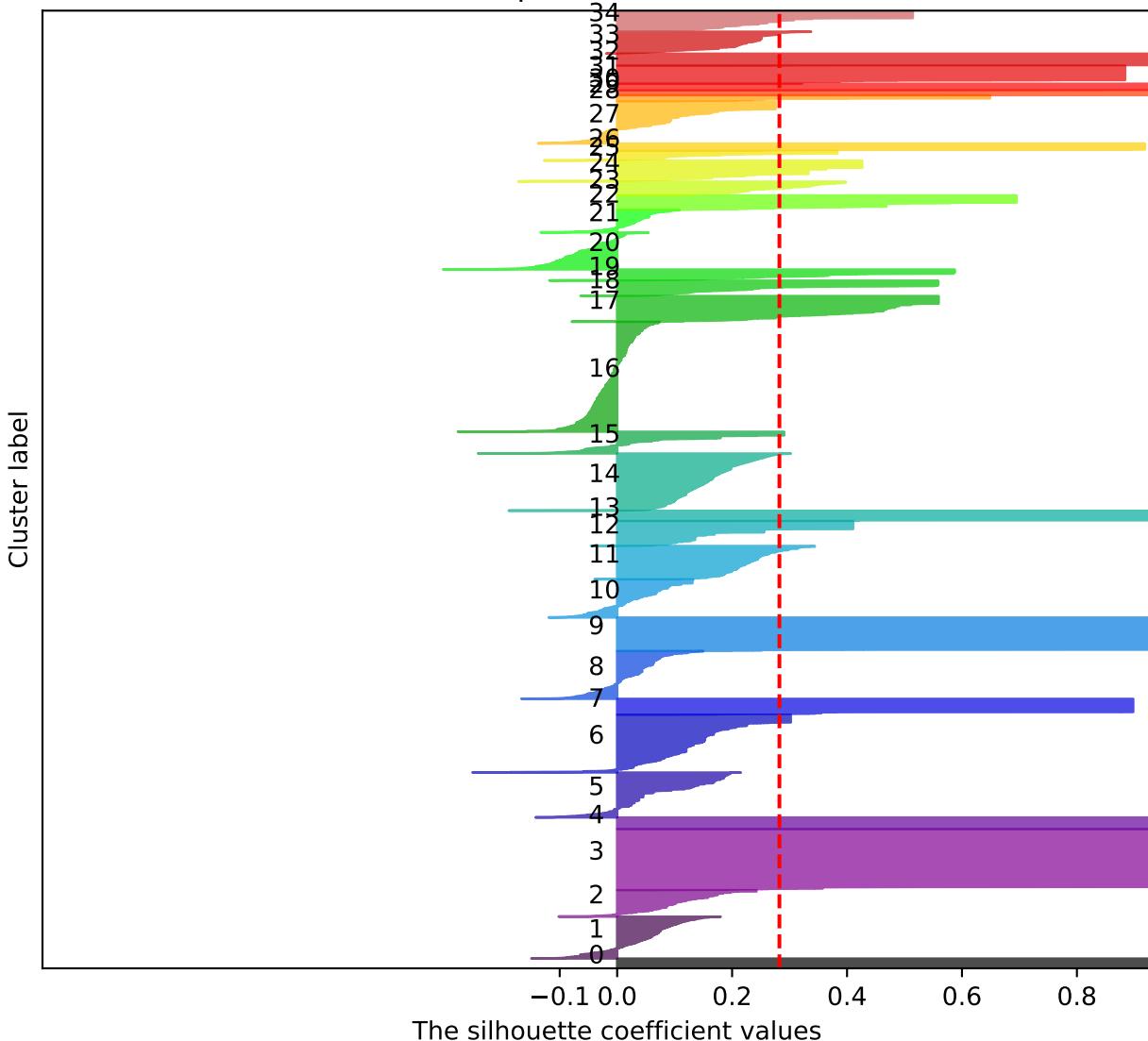


The visualization of the clustered data.

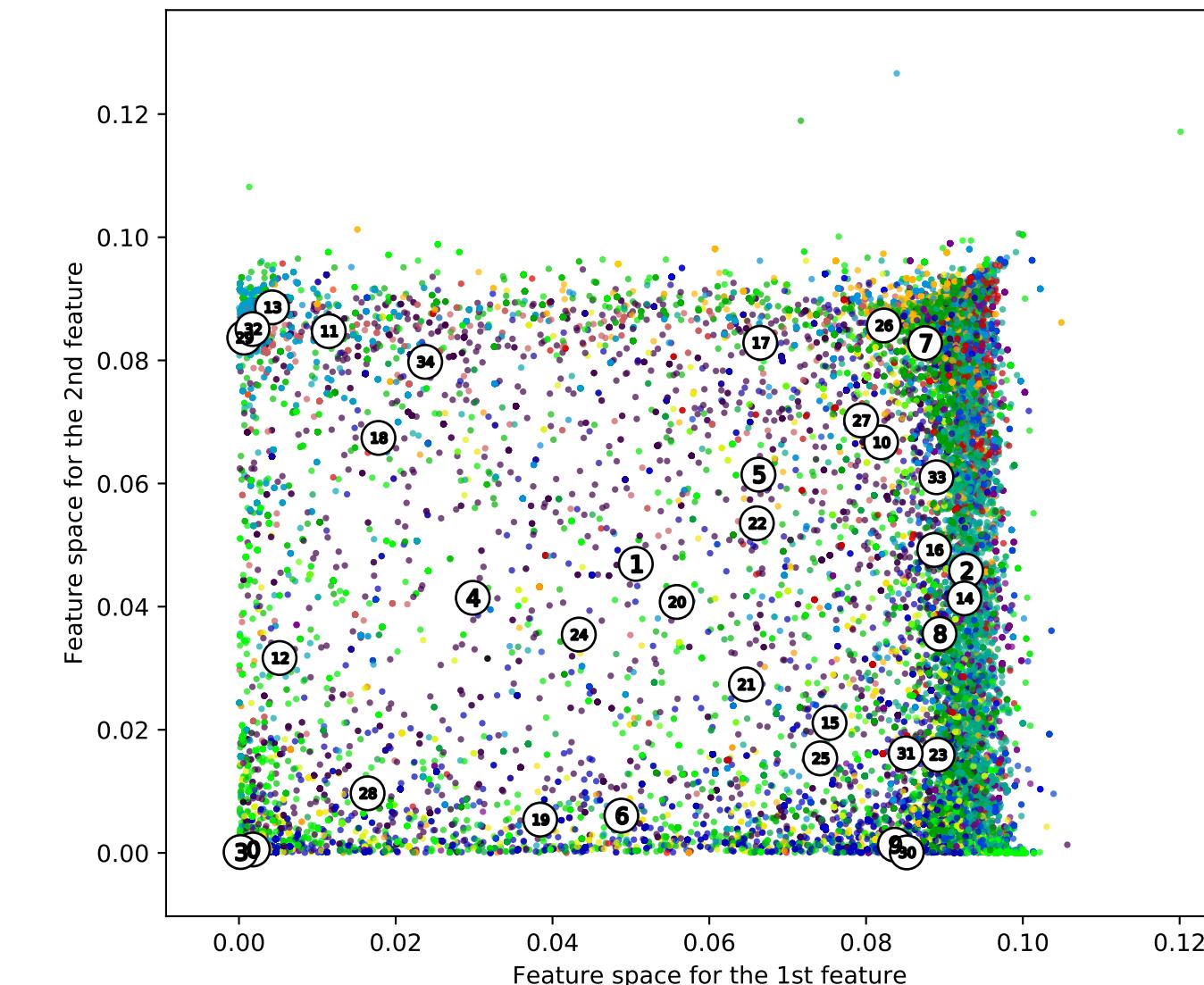


Silhouette analysis for KMeans clustering on sample data with n_clusters = 35 with Average Silhouette of: 0.2823009192943573

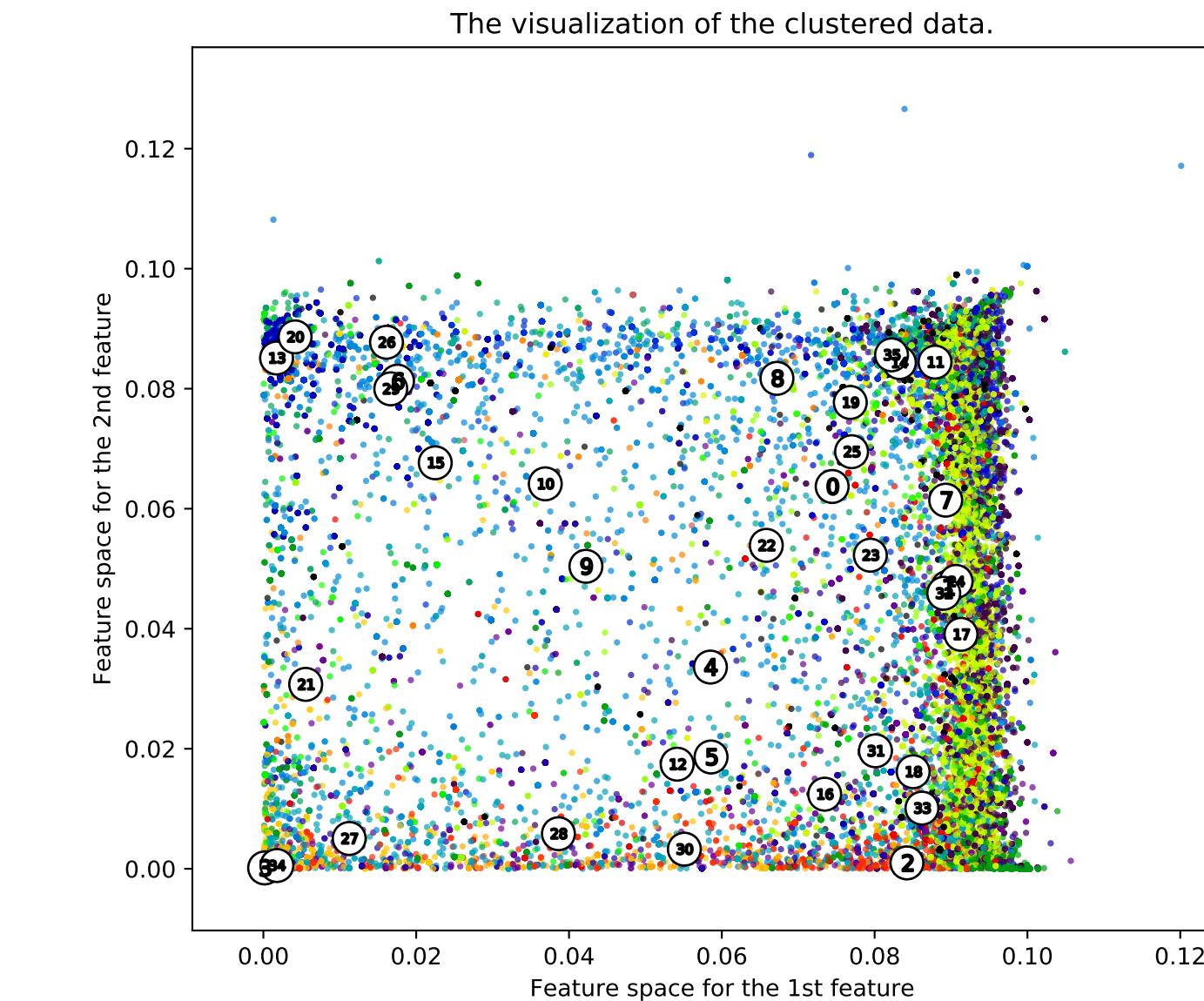
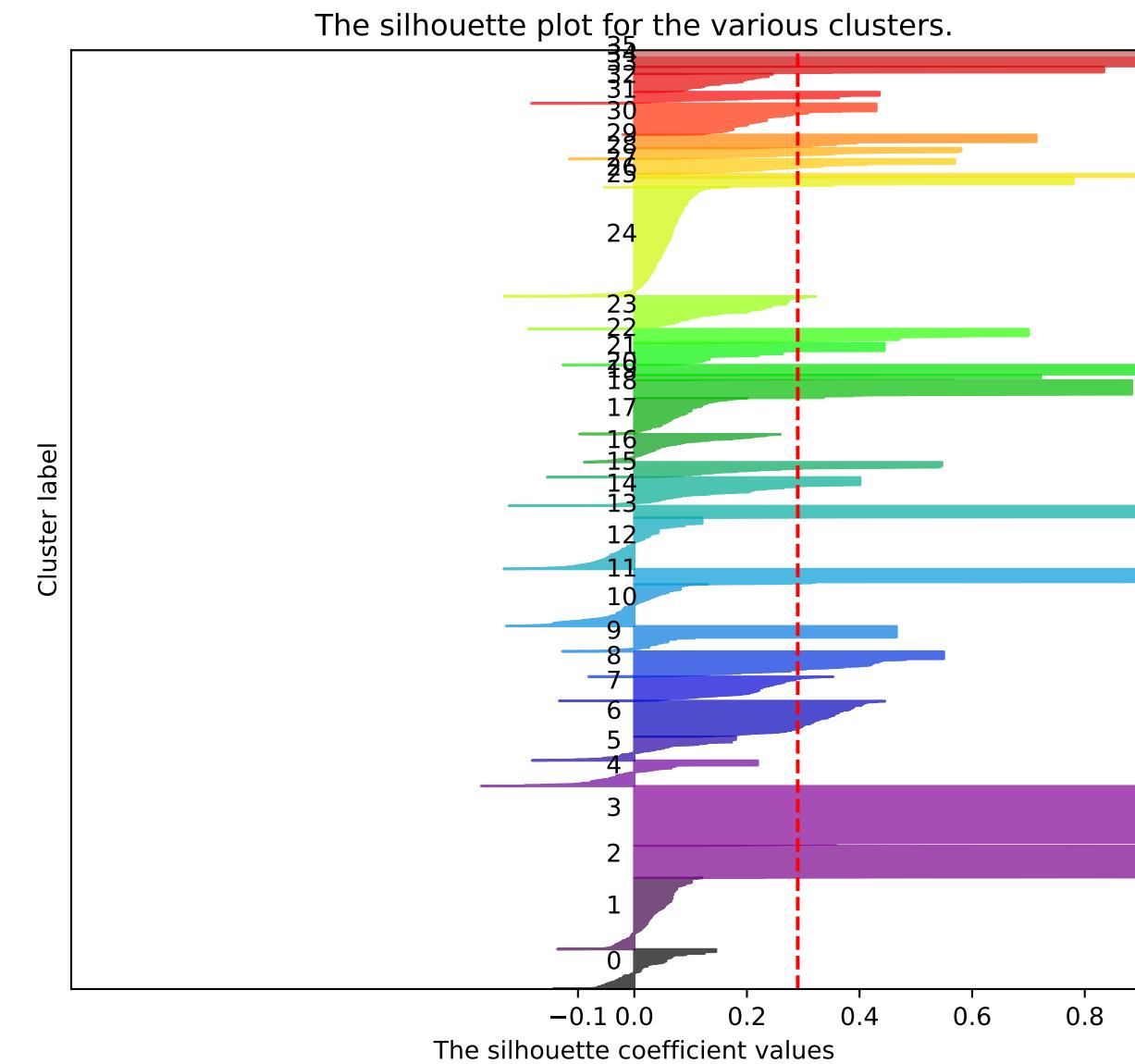
The silhouette plot for the various clusters.



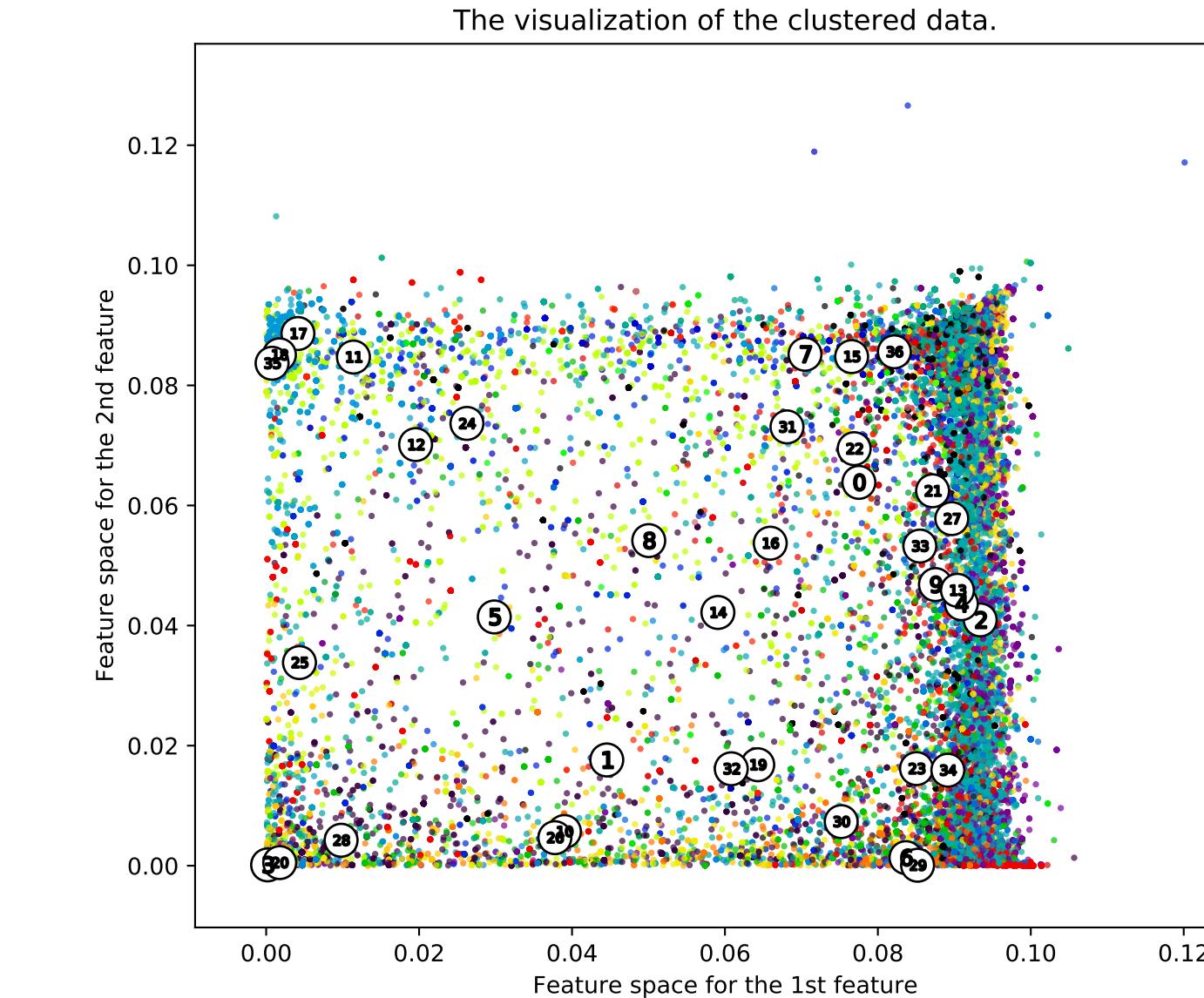
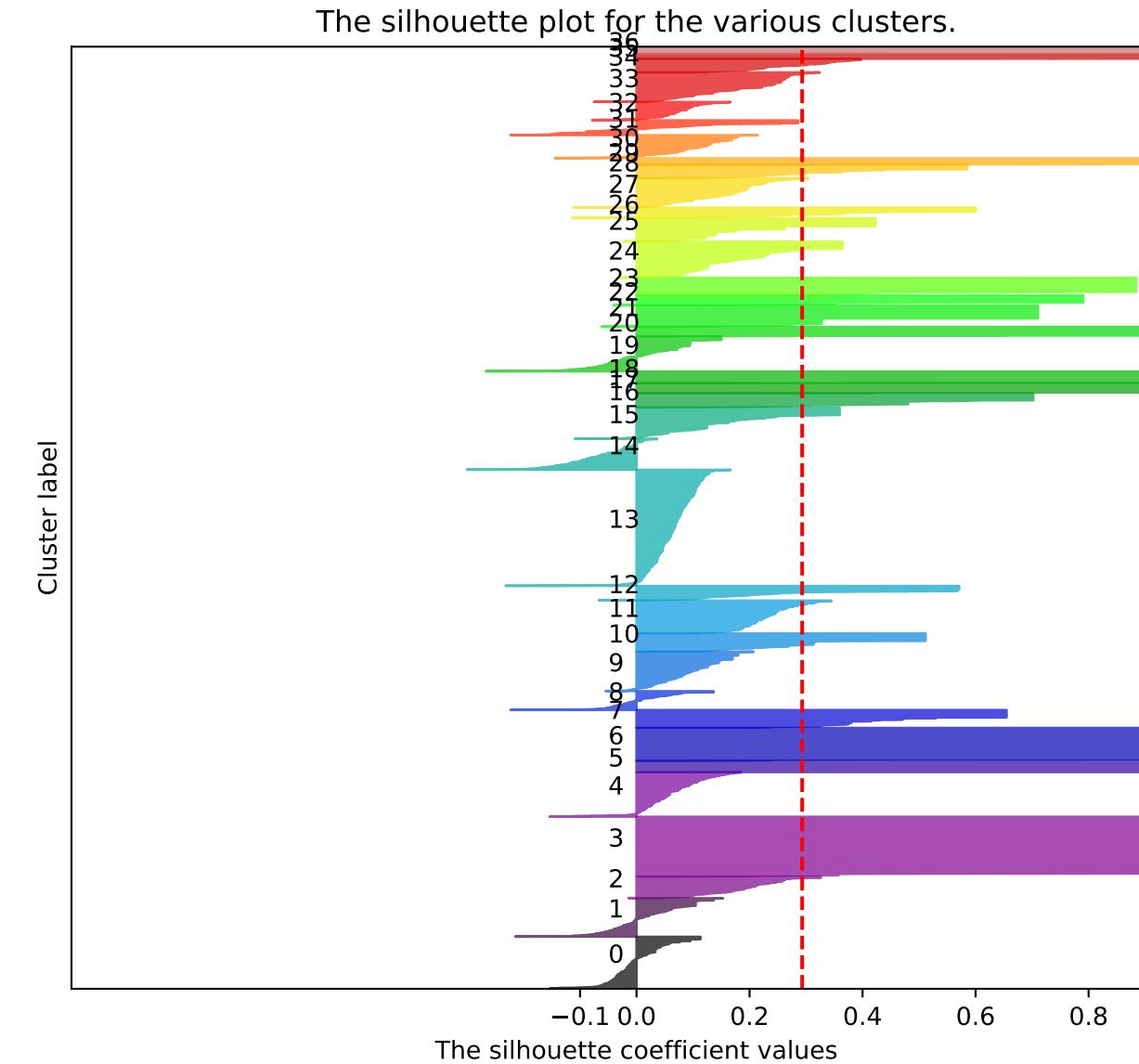
The visualization of the clustered data.



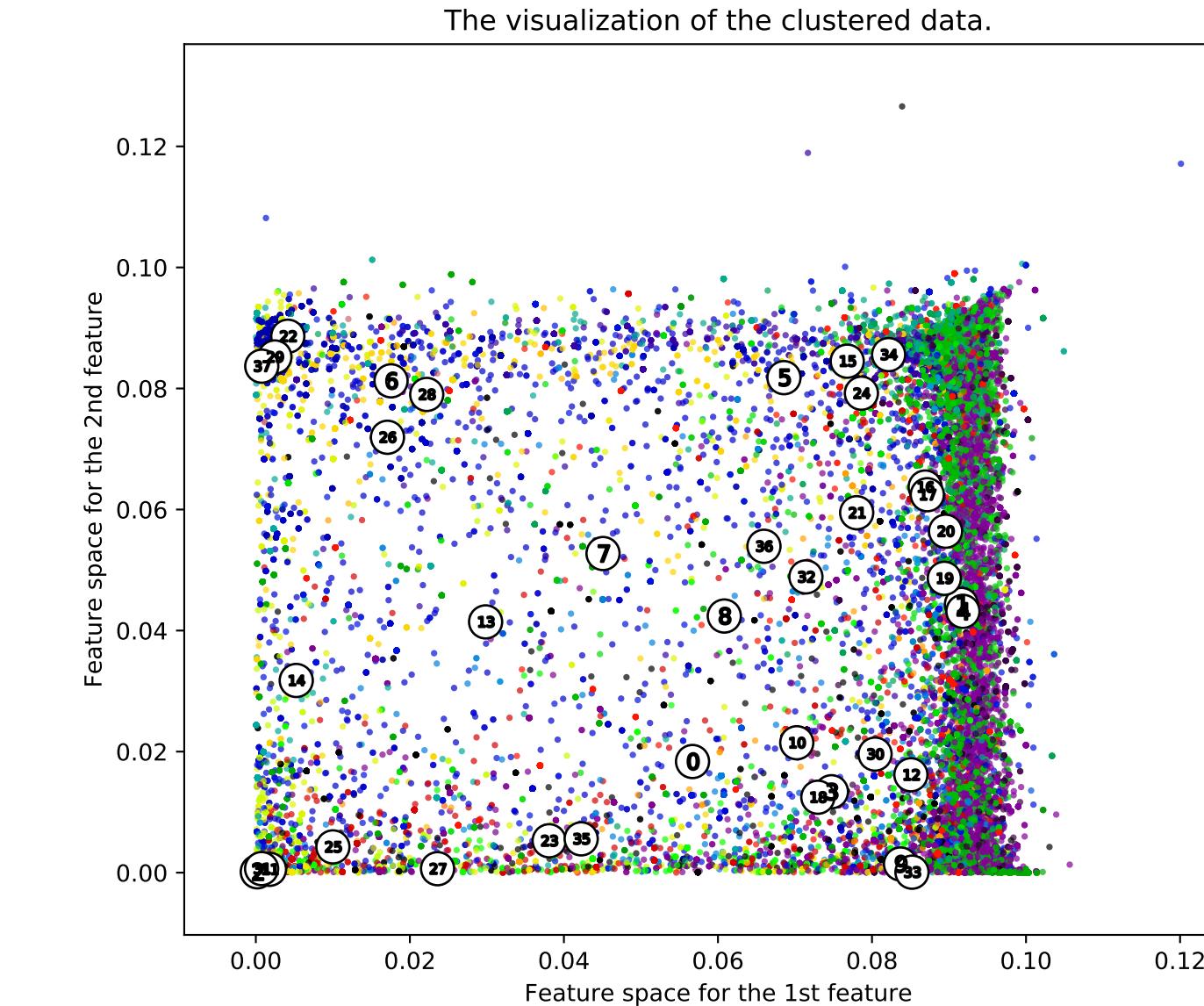
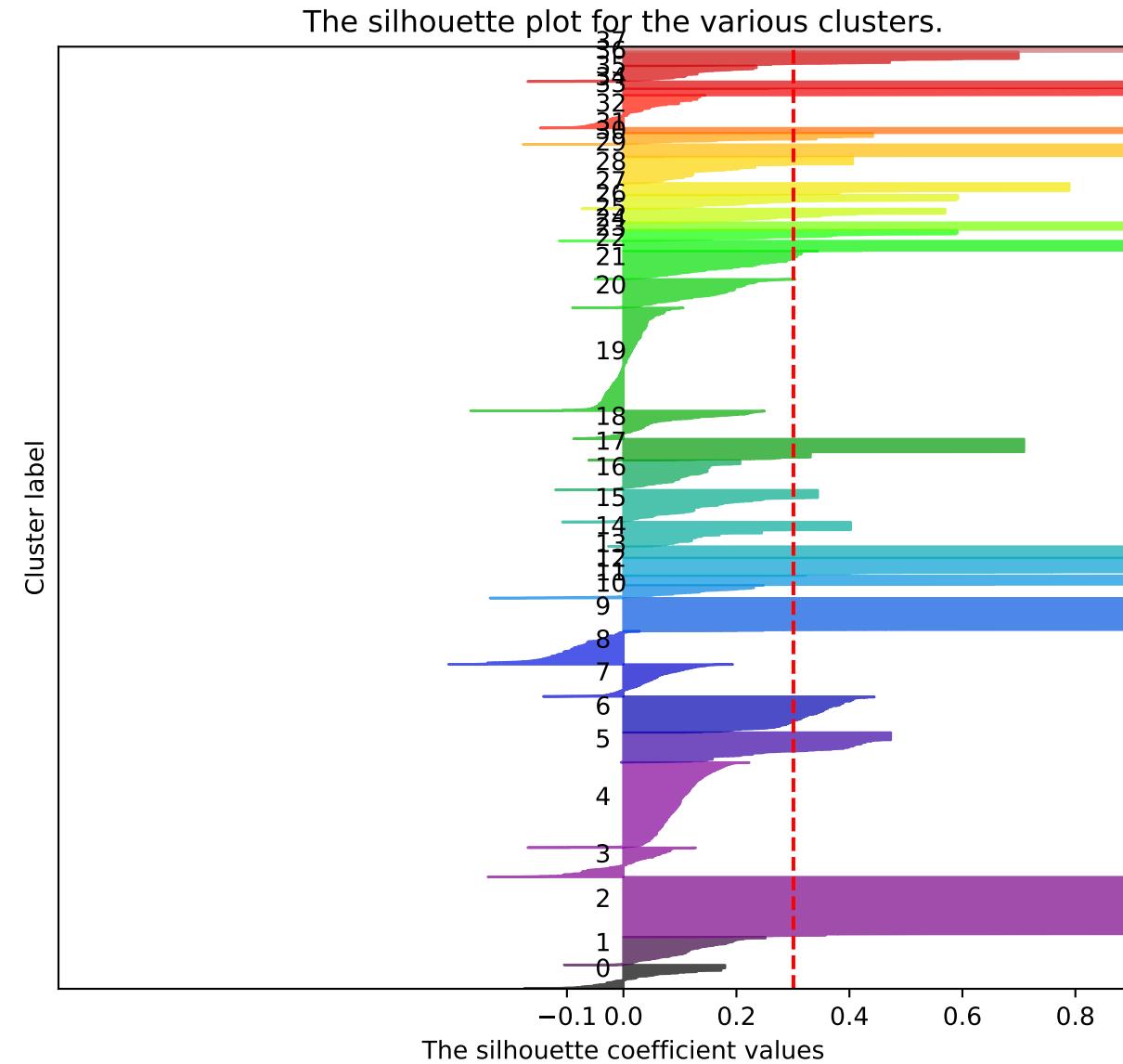
Silhouette analysis for KMeans clustering on sample data with n_clusters = 36 with Average Silhouette of: 0.29031896591186523



Silhouette analysis for KMeans clustering on sample data with n_clusters = 37 with Average Silhouette of: 0.29310092329978943

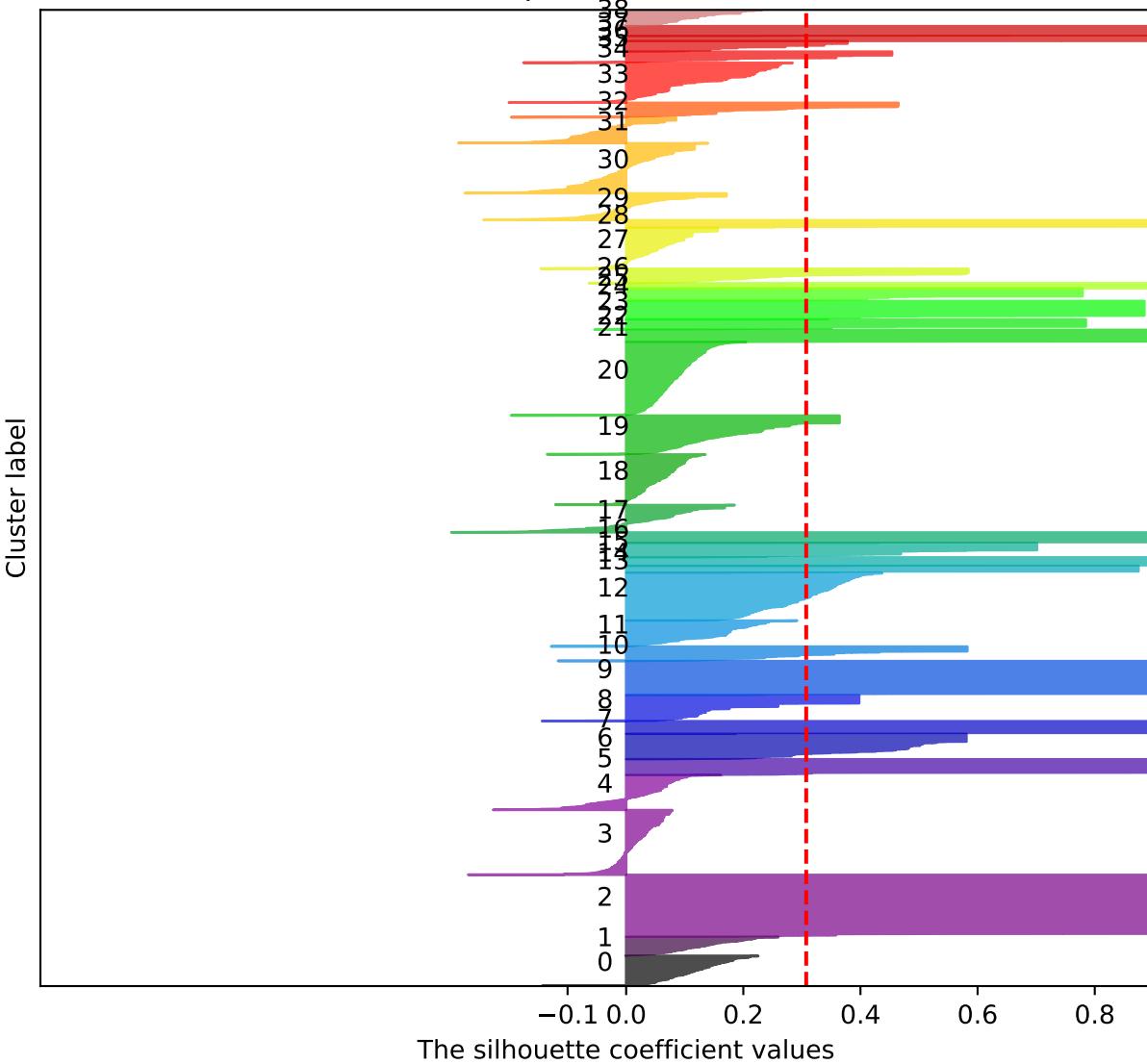


Silhouette analysis for KMeans clustering on sample data with n_clusters = 38 with Average Silhouette of: 0.3009586036205292

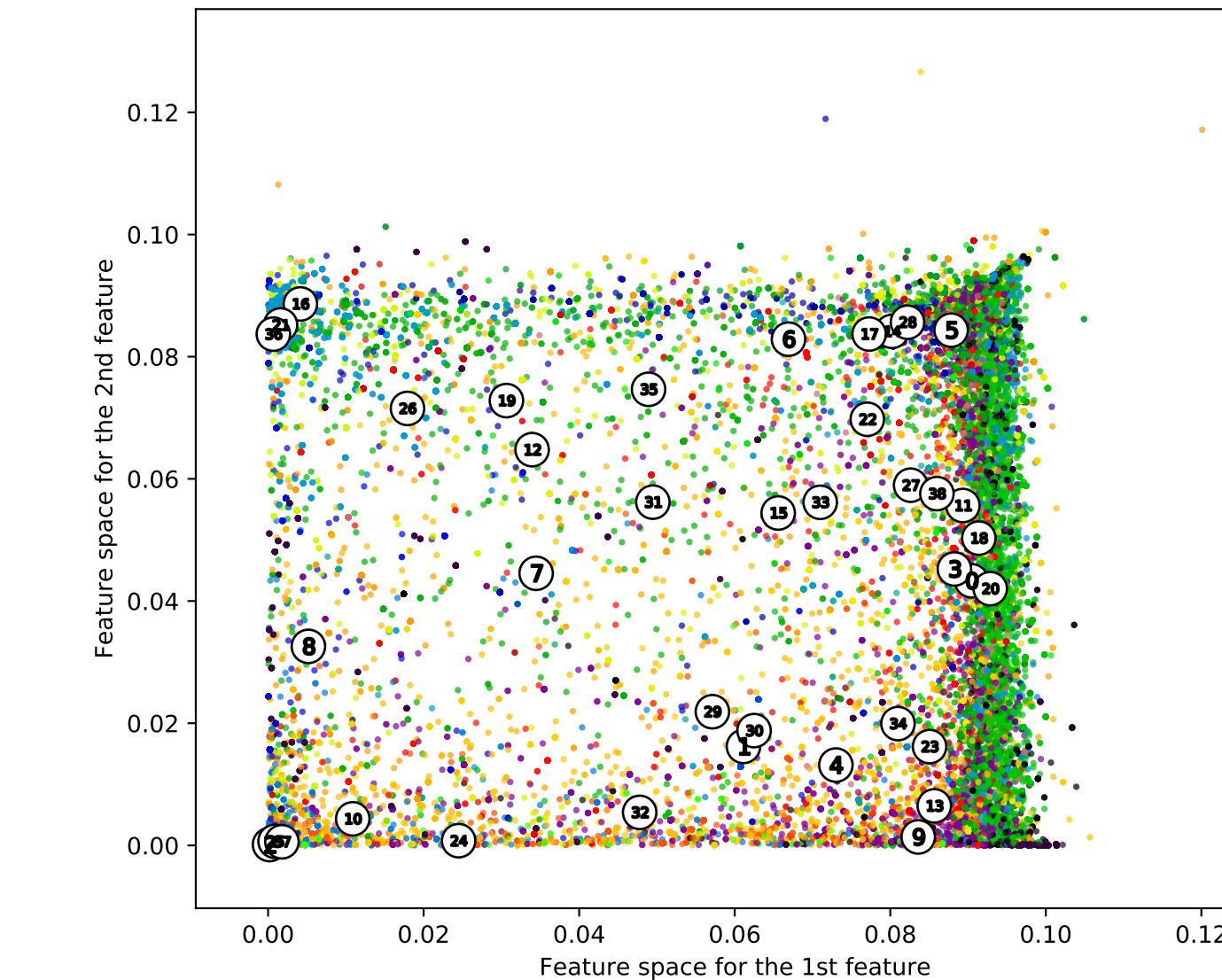


Silhouette analysis for KMeans clustering on sample data with n_clusters = 39 with Average Silhouette of: 0.30738216638565063

The silhouette plot for the various clusters

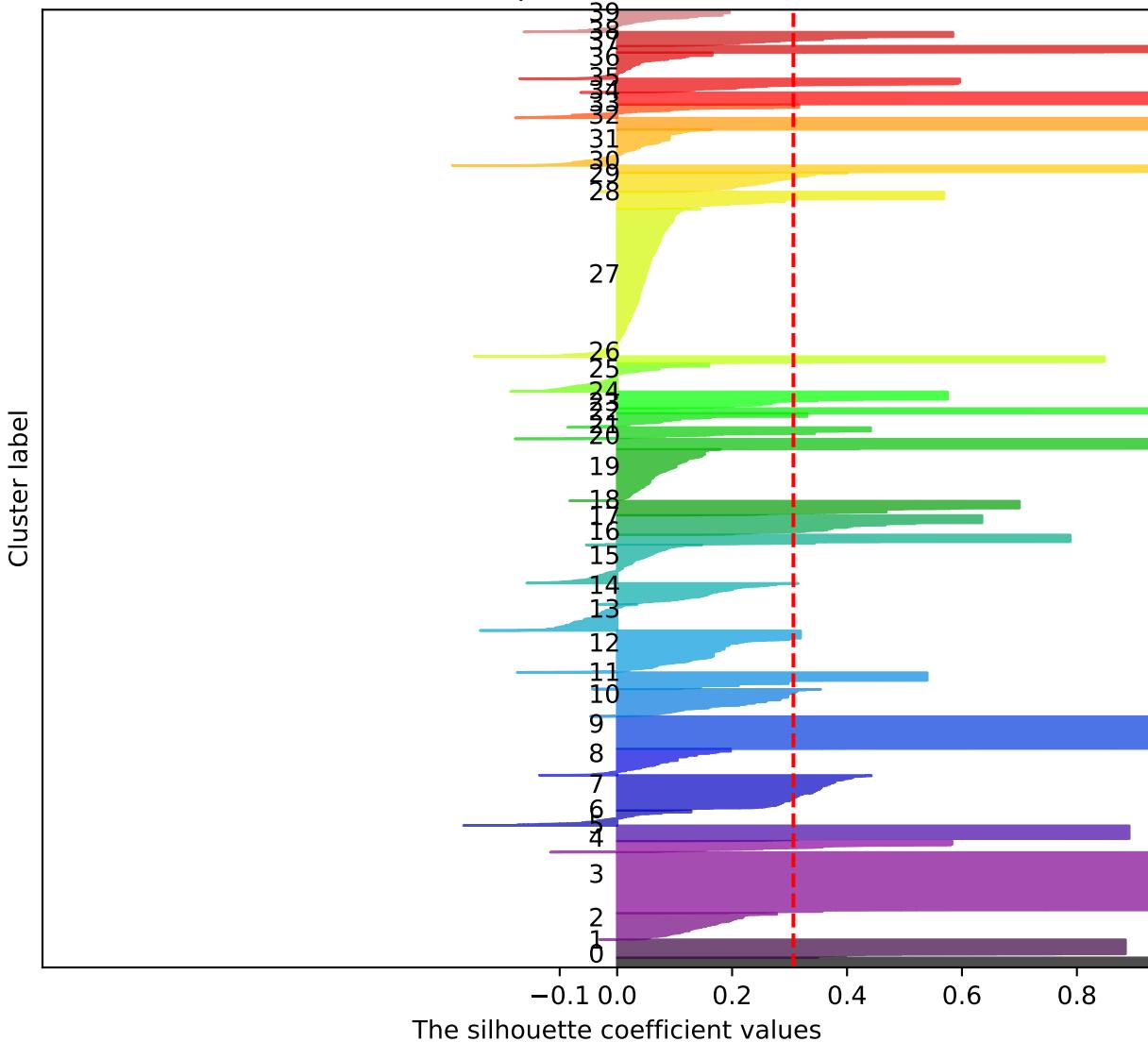


The visualization of the clustered data



Silhouette analysis for KMeans clustering on sample data with n_clusters = 40 with Average Silhouette of: 0.3067229986190796

The silhouette plot for the various clusters.



The visualization of the clustered data.

