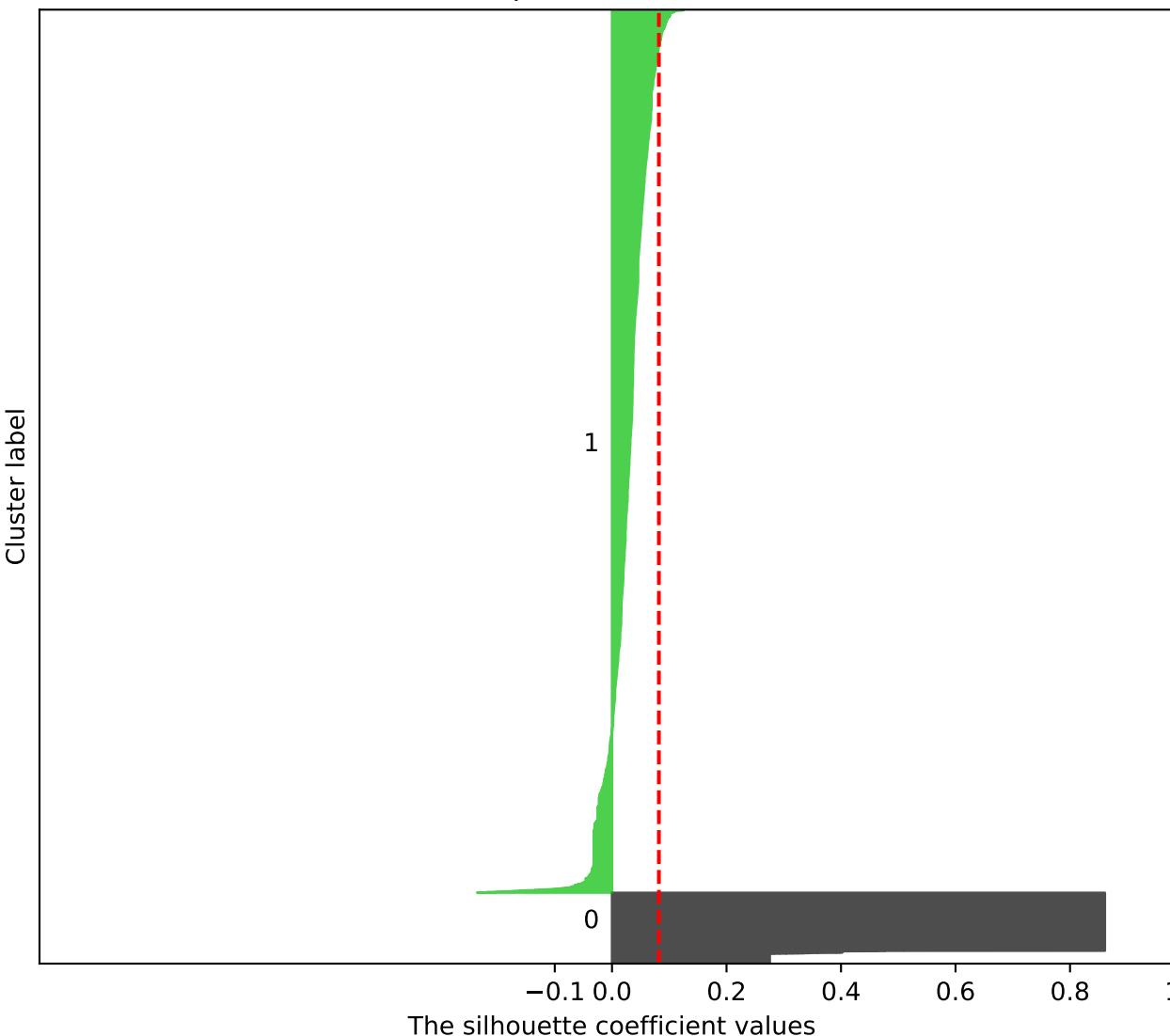
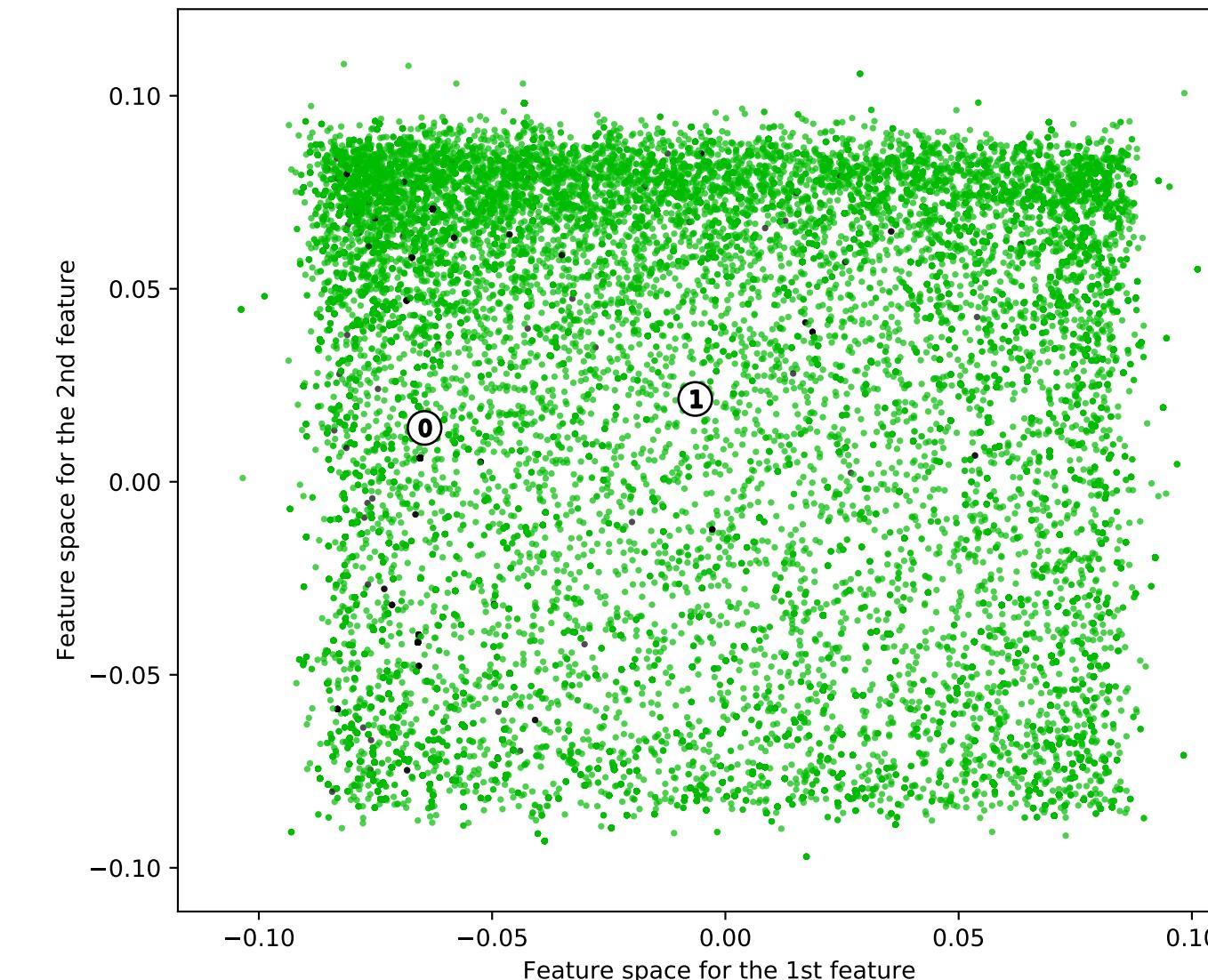


Silhouette analysis for KMeans clustering on sample data with n_clusters = 2 with Average Silhouette of: 0.0818992480635643

The silhouette plot for the various clusters.

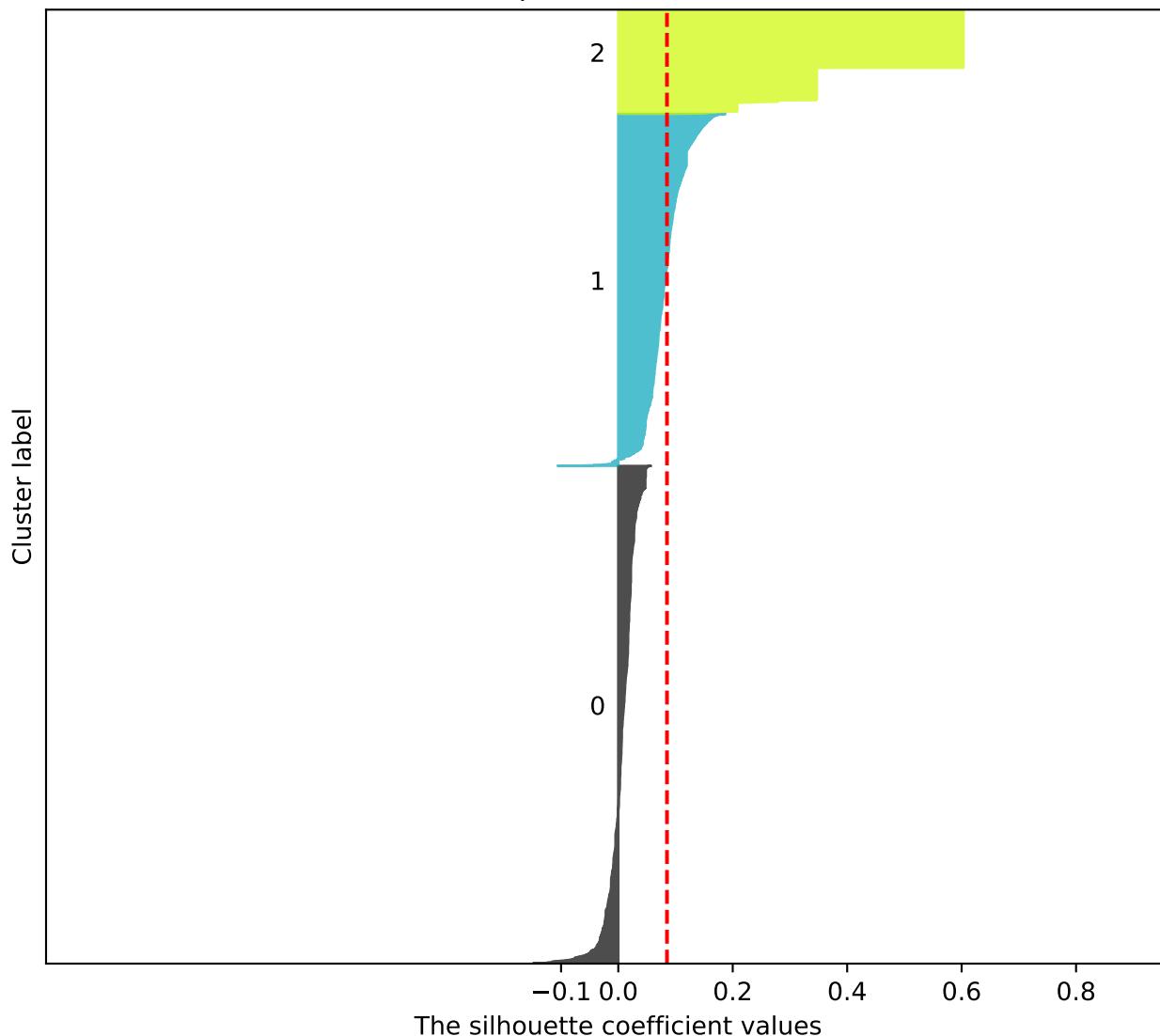


The visualization of the clustered data.

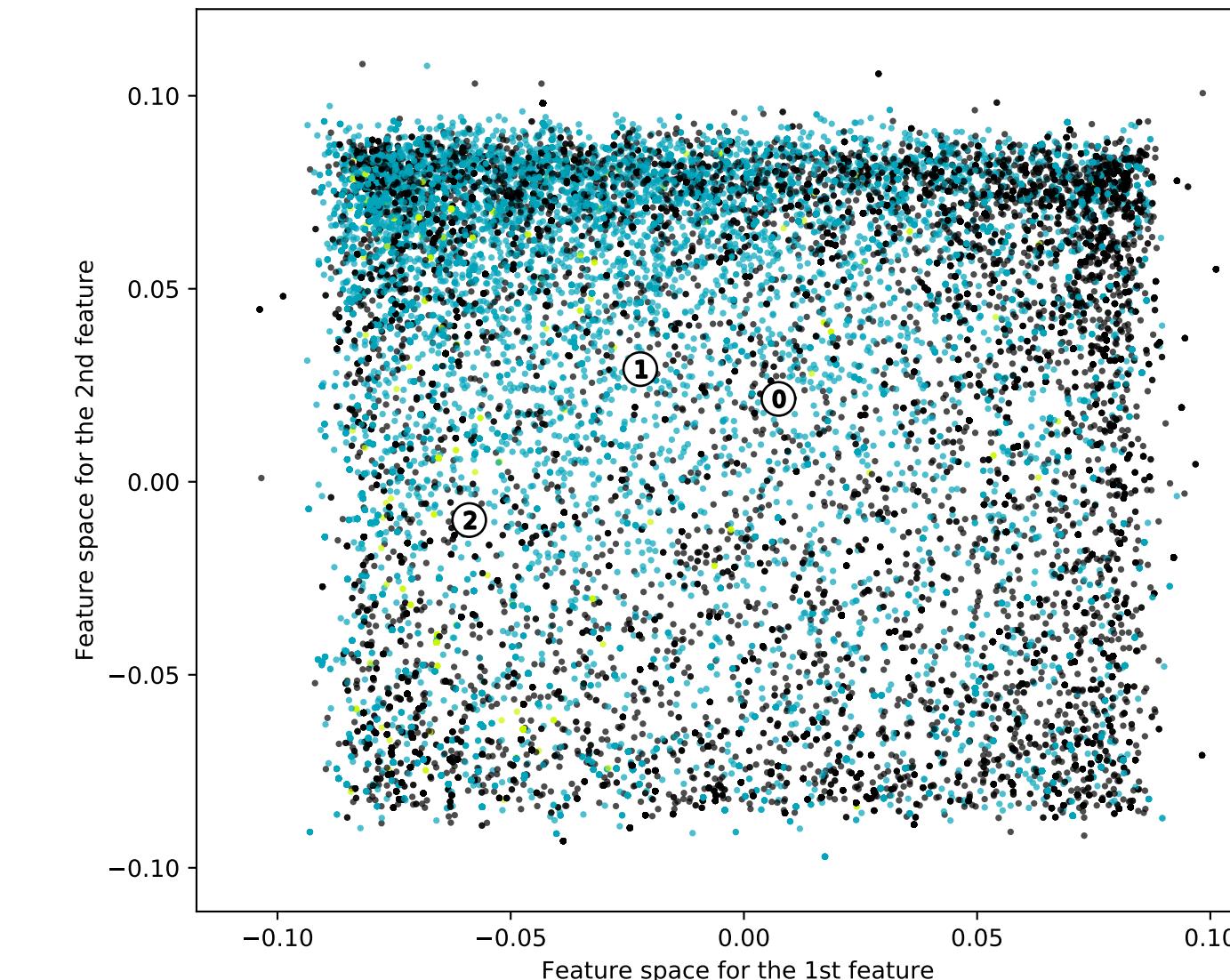


Silhouette analysis for KMeans clustering on sample data with n_clusters = 3 with Average Silhouette of: 0.0850856825709343

The silhouette plot for the various clusters.

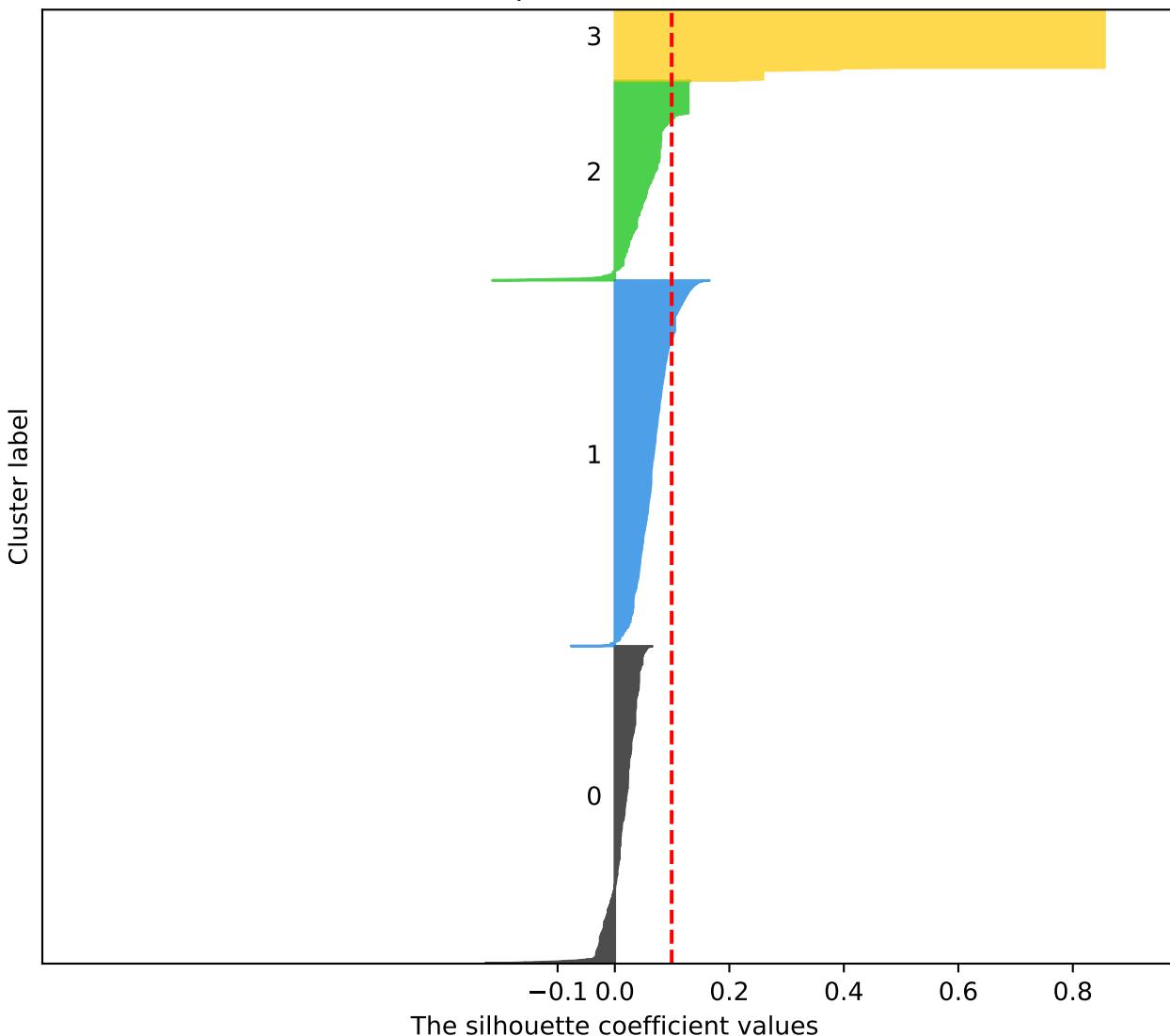


The visualization of the clustered data.

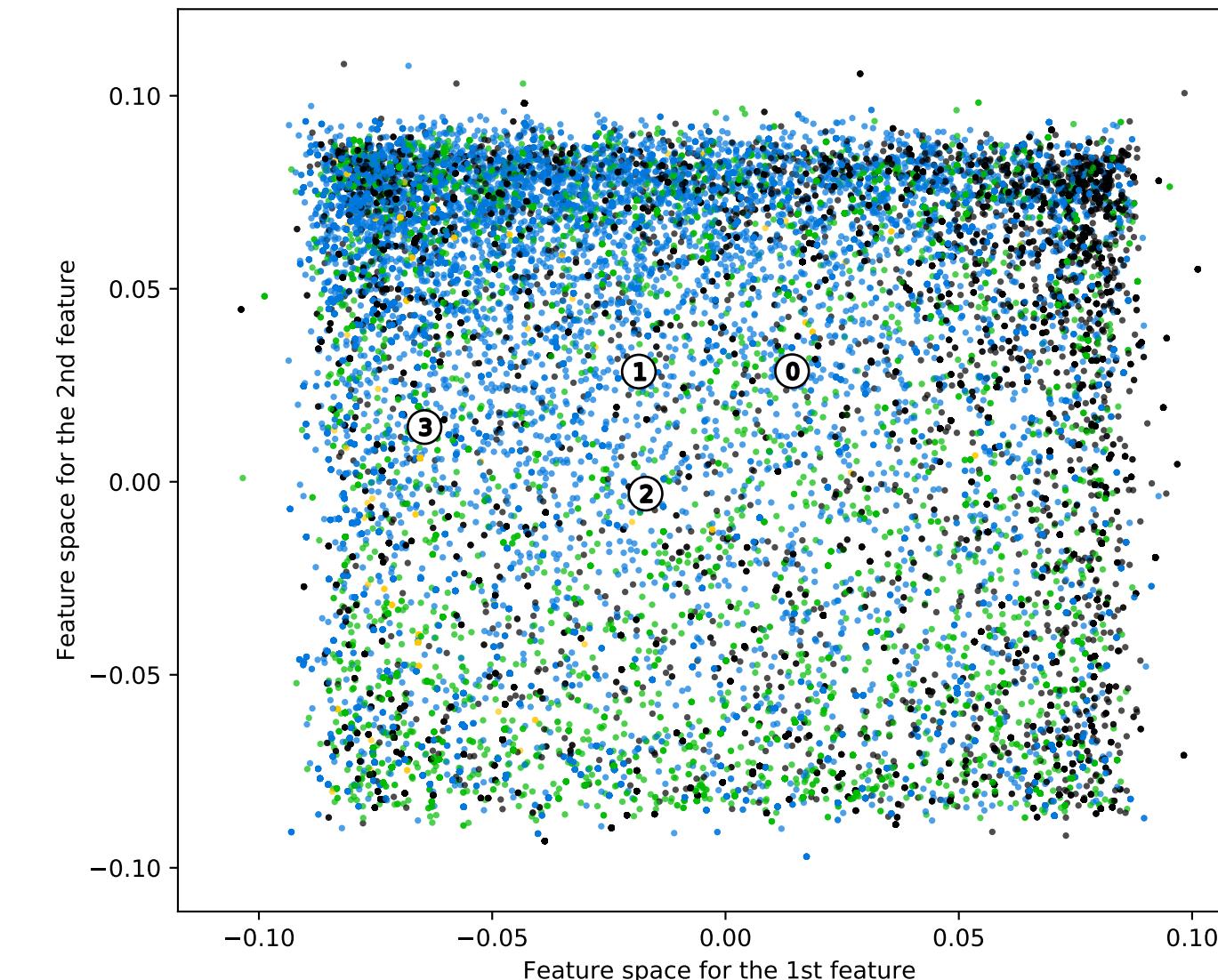


Silhouette analysis for KMeans clustering on sample data with n_clusters = 4 with Average Silhouette of: 0.09930171072483063

The silhouette plot for the various clusters.

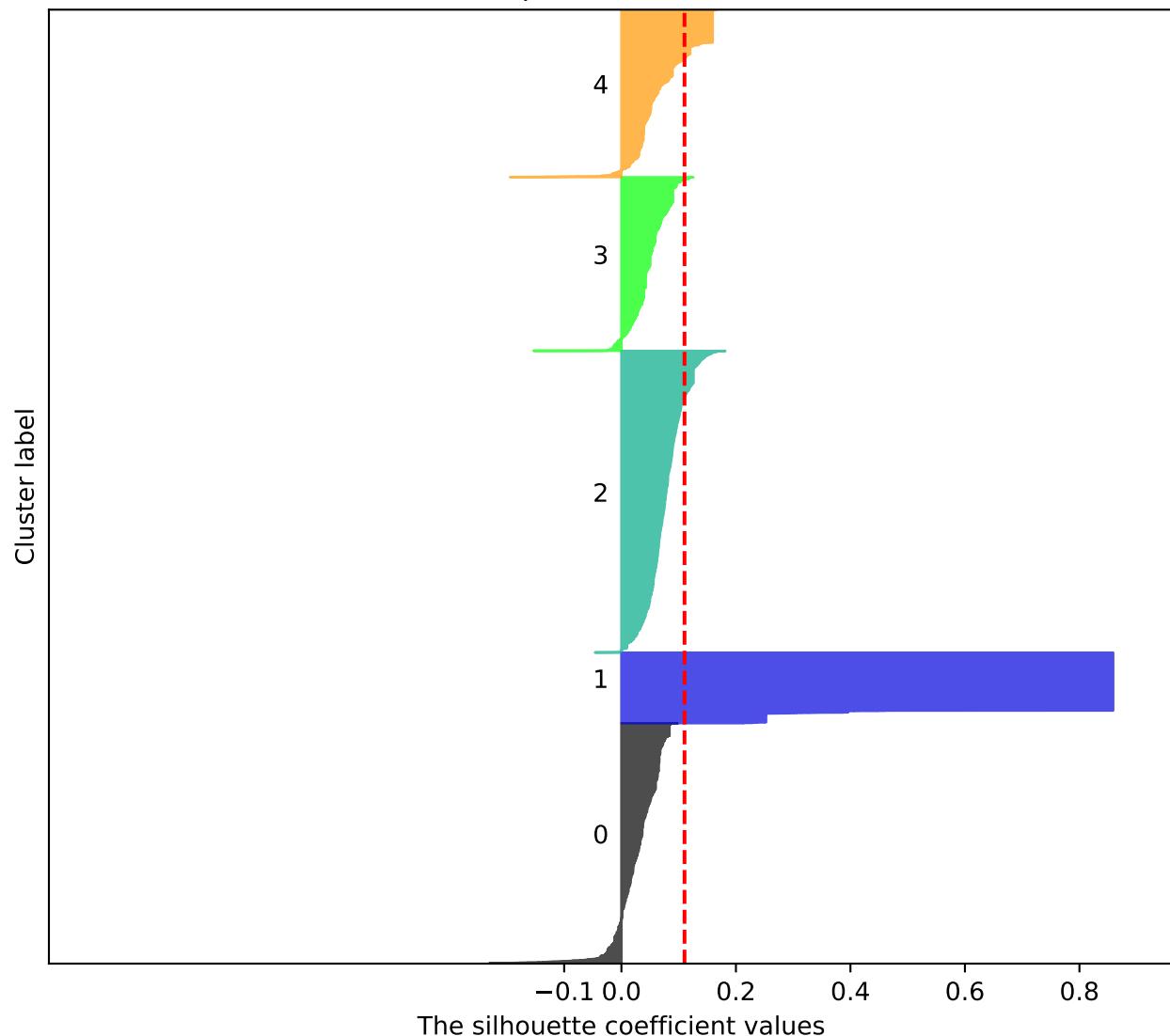


The visualization of the clustered data.

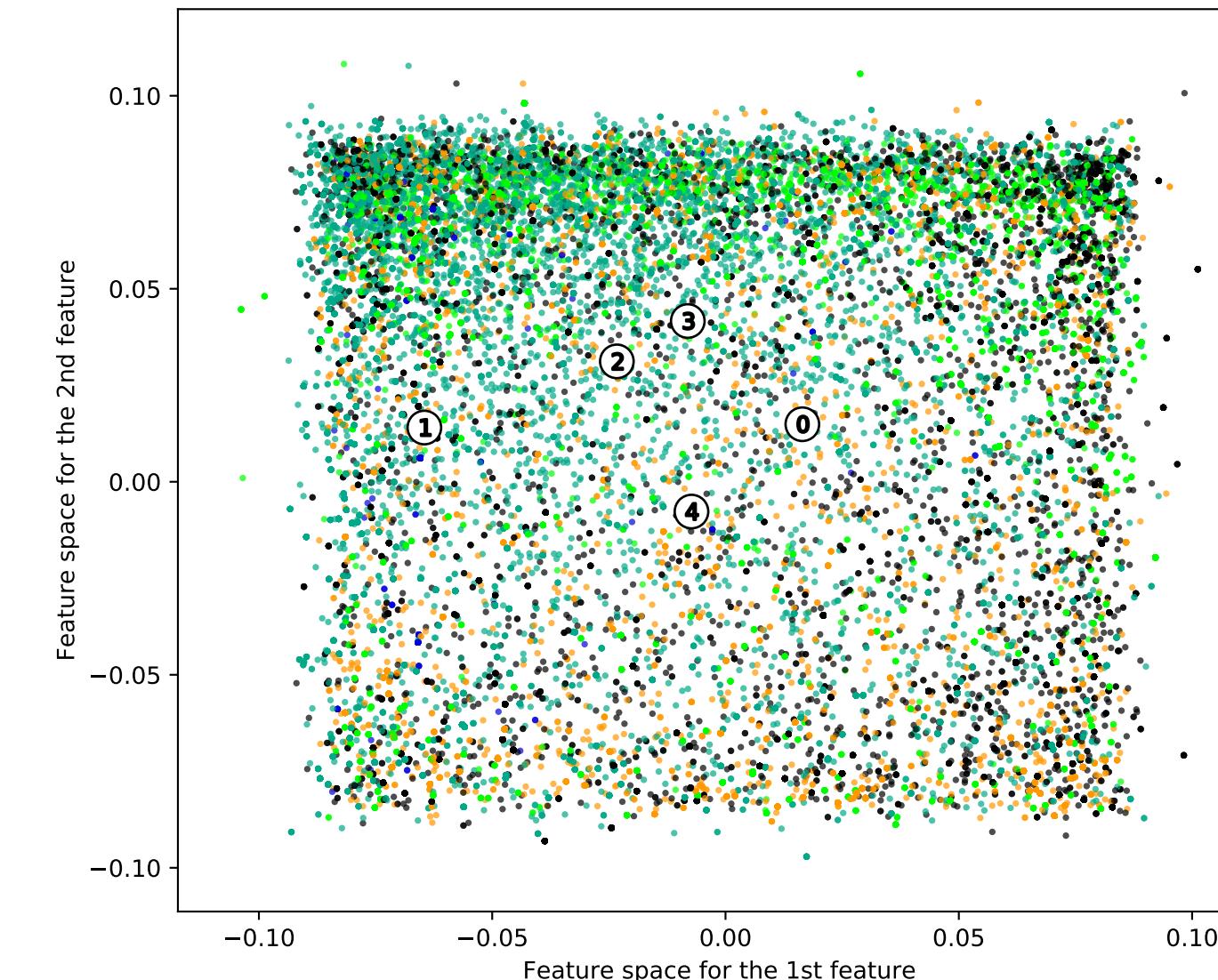


Silhouette analysis for KMeans clustering on sample data with n_clusters = 5 with Average Silhouette of: 0.11019507795572281

The silhouette plot for the various clusters.

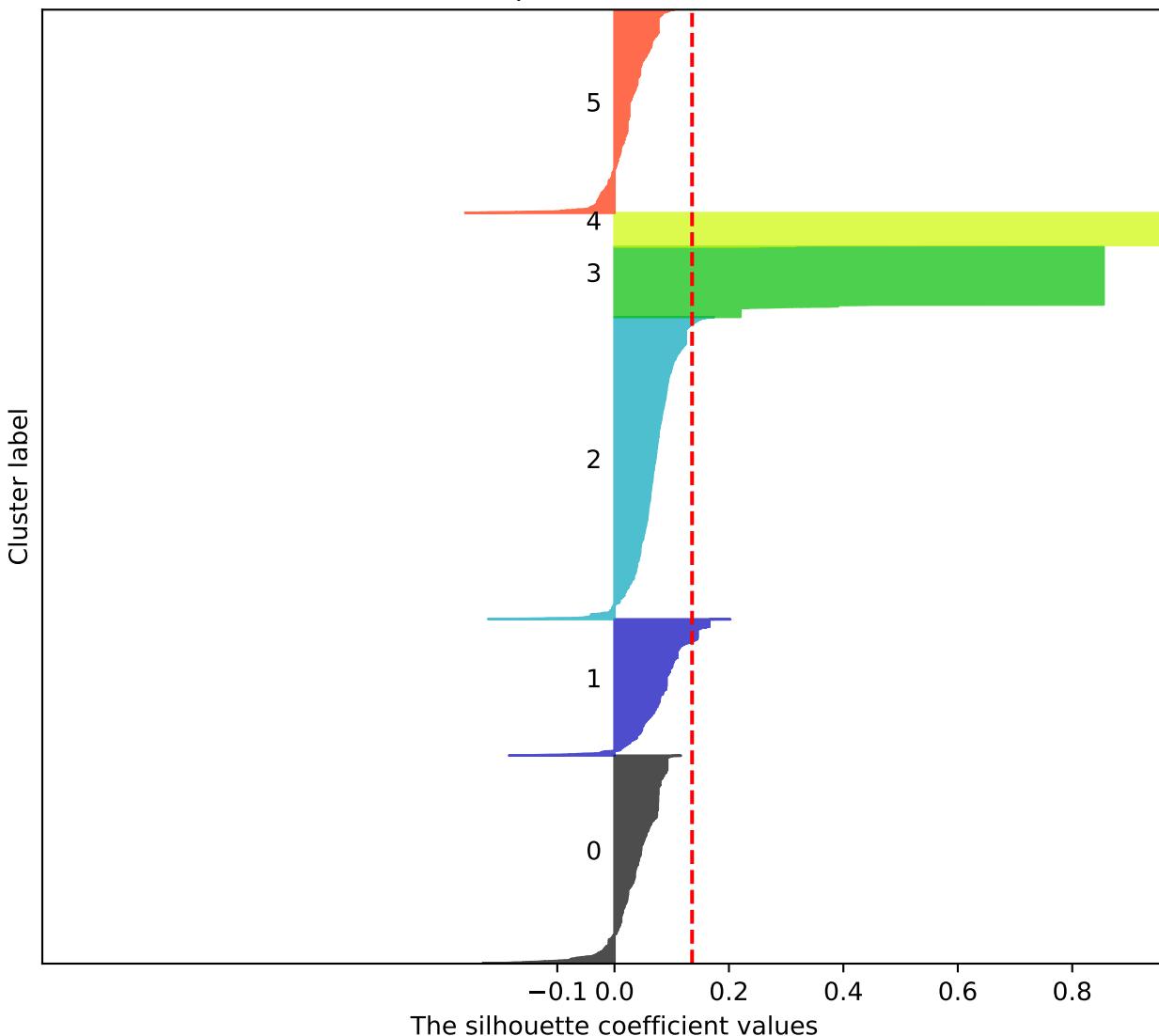


The visualization of the clustered data.

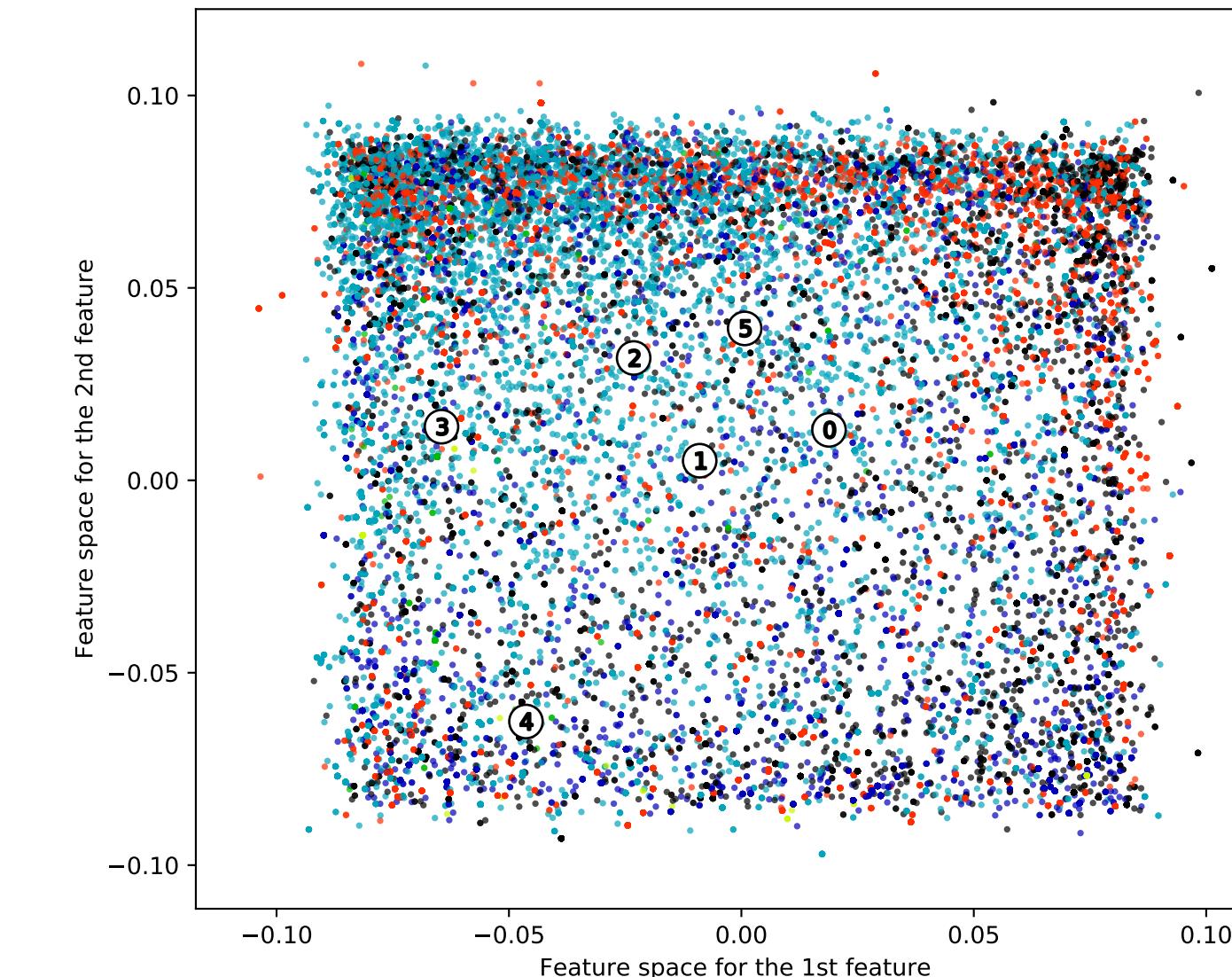


Silhouette analysis for KMeans clustering on sample data with n_clusters = 6 with Average Silhouette of: 0.13561061024665833

The silhouette plot for the various clusters.

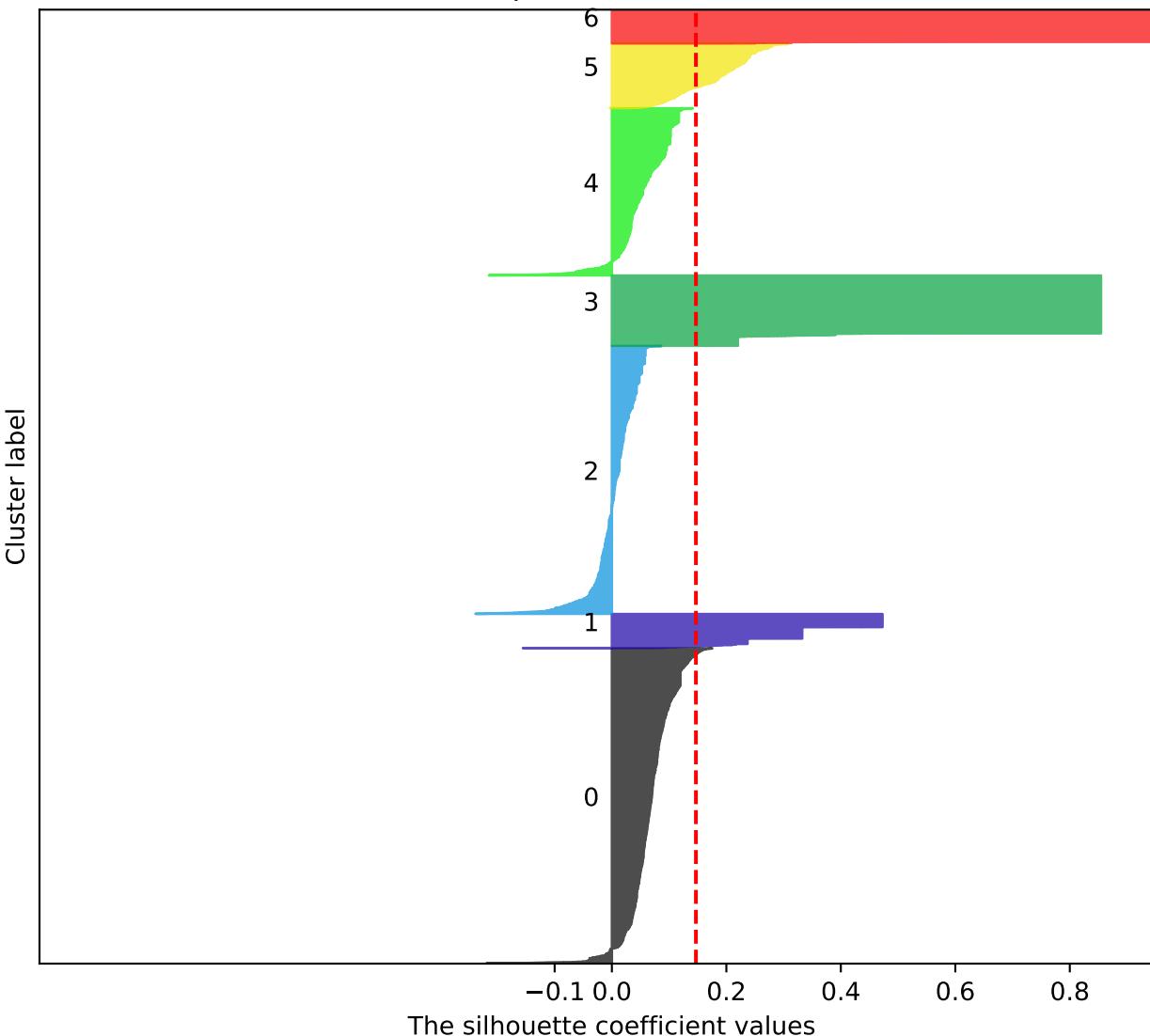


The visualization of the clustered data.

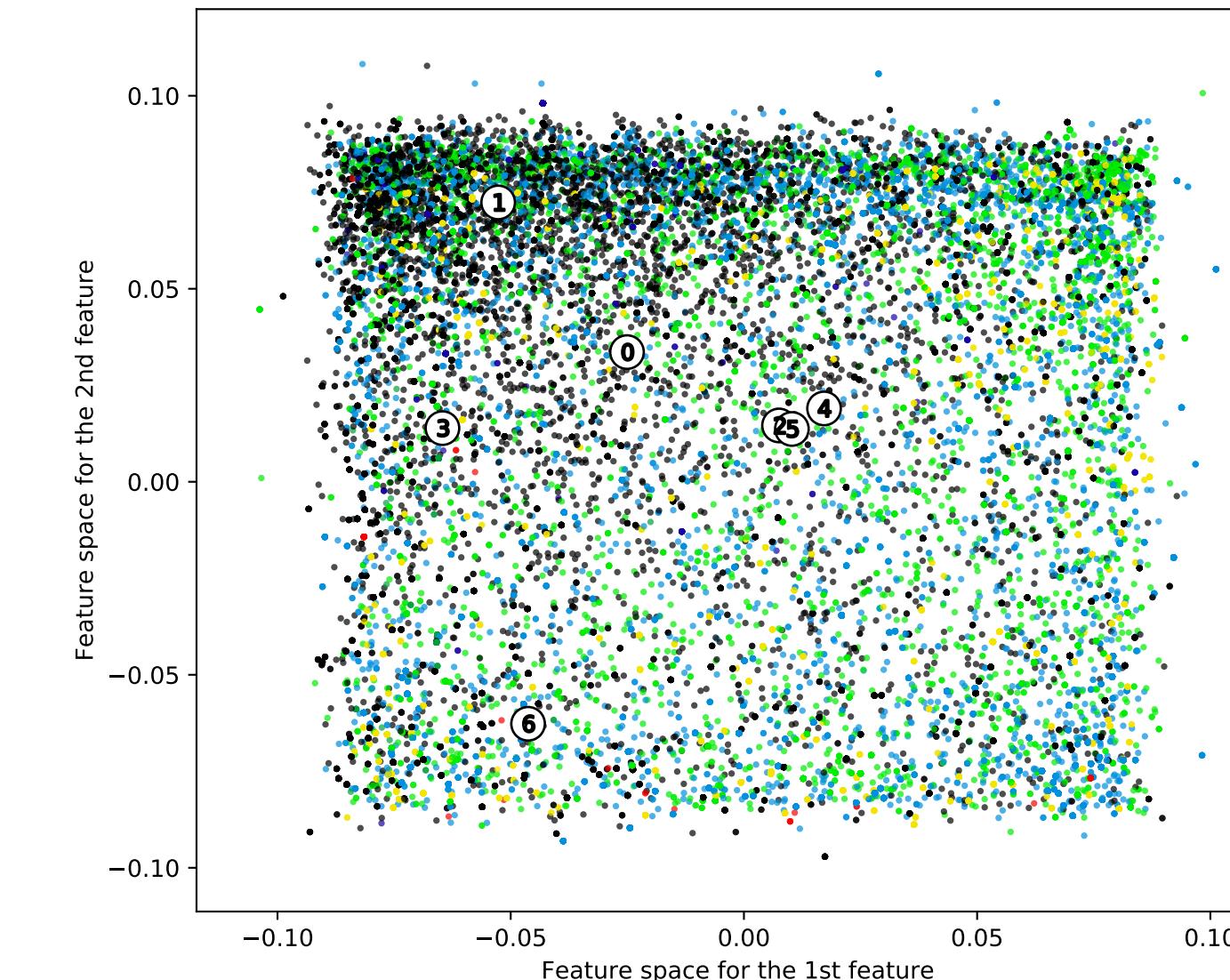


Silhouette analysis for KMeans clustering on sample data with n_clusters = 7 with Average Silhouette of: 0.146846741437912

The silhouette plot for the various clusters.

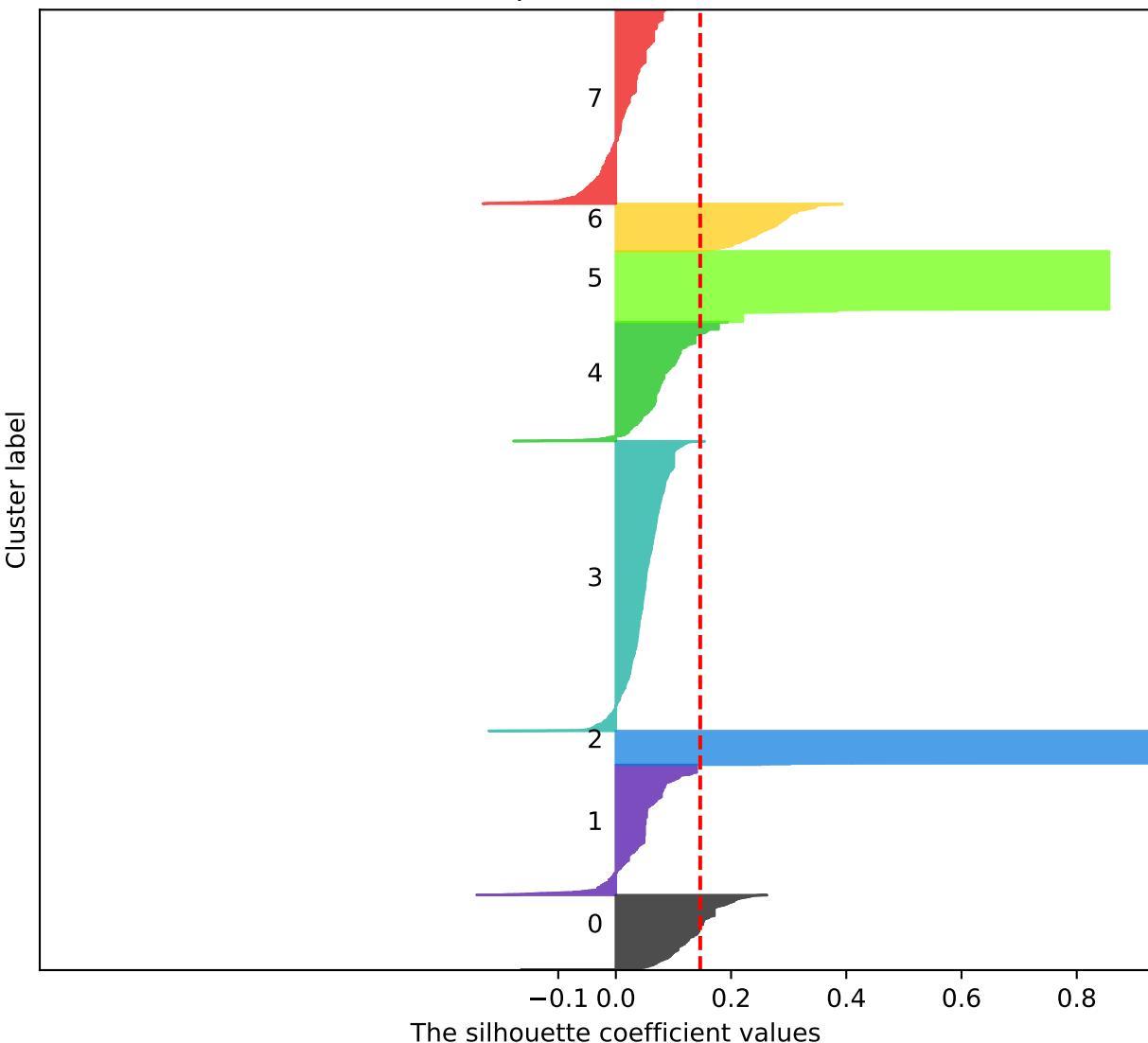


The visualization of the clustered data.

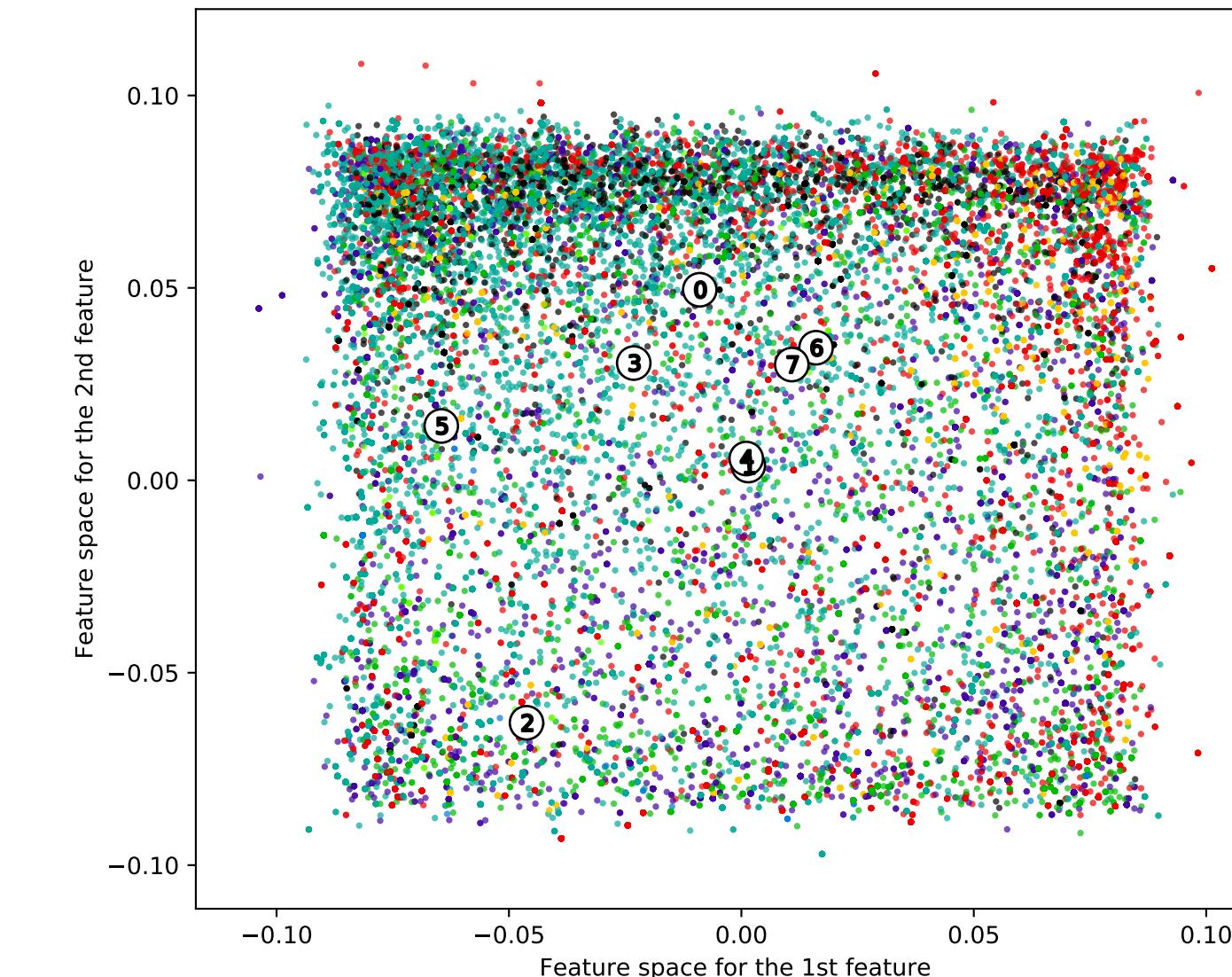


Silhouette analysis for KMeans clustering on sample data with n_clusters = 8 with Average Silhouette of: 0.146382674574852

The silhouette plot for the various clusters.

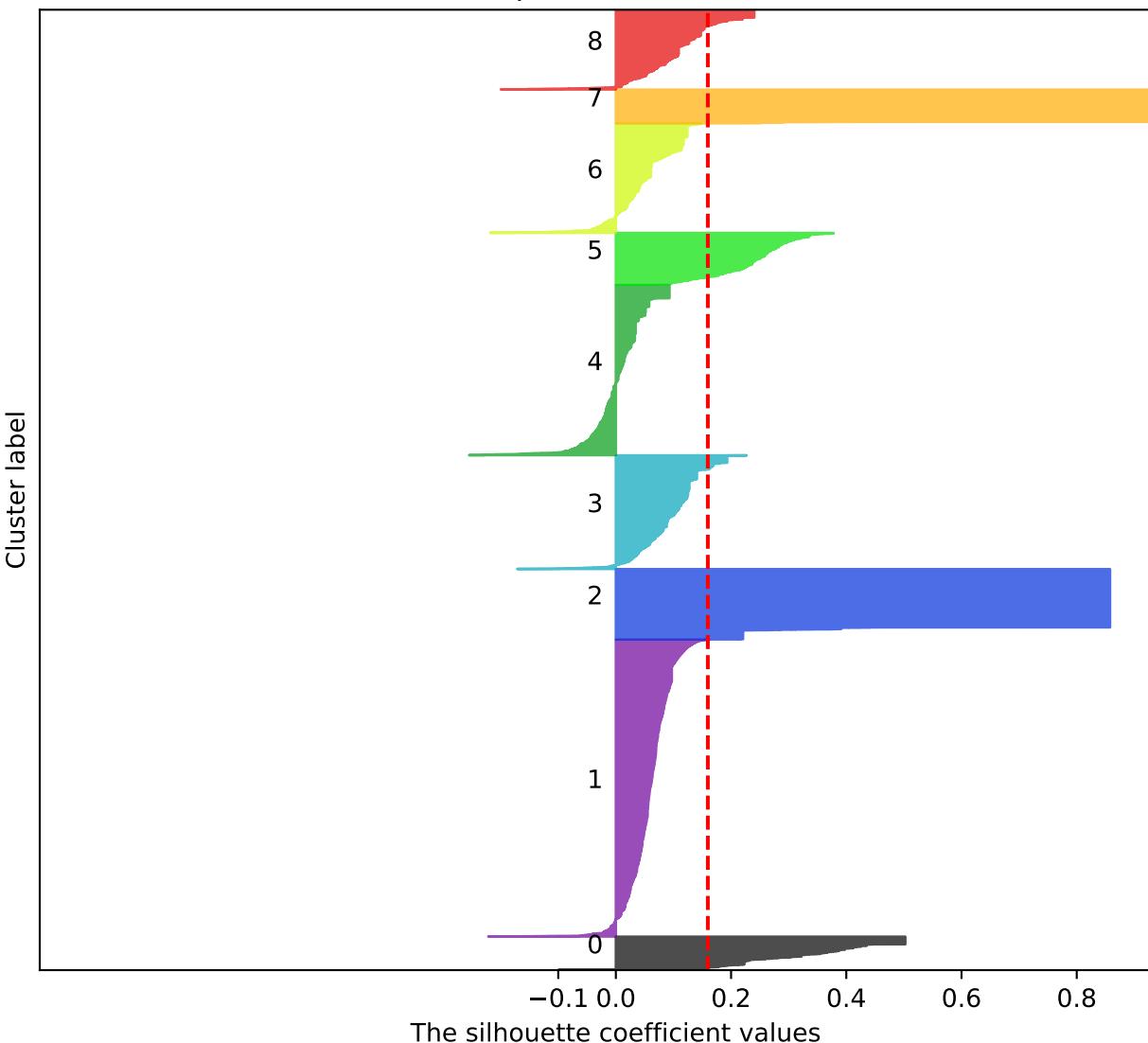


The visualization of the clustered data.

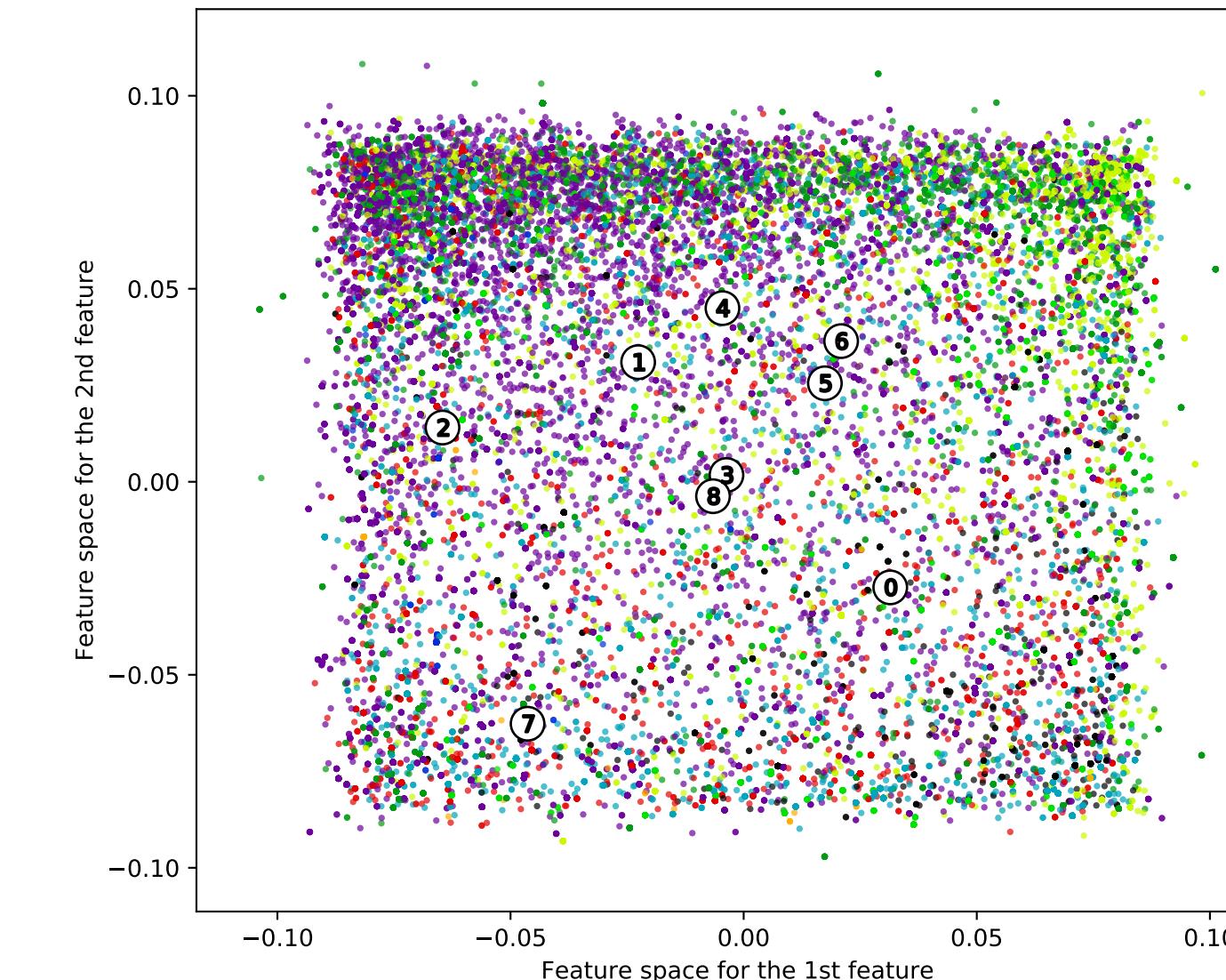


Silhouette analysis for KMeans clustering on sample data with n_clusters = 9 with Average Silhouette of: 0.1596447080373764

The silhouette plot for the various clusters.

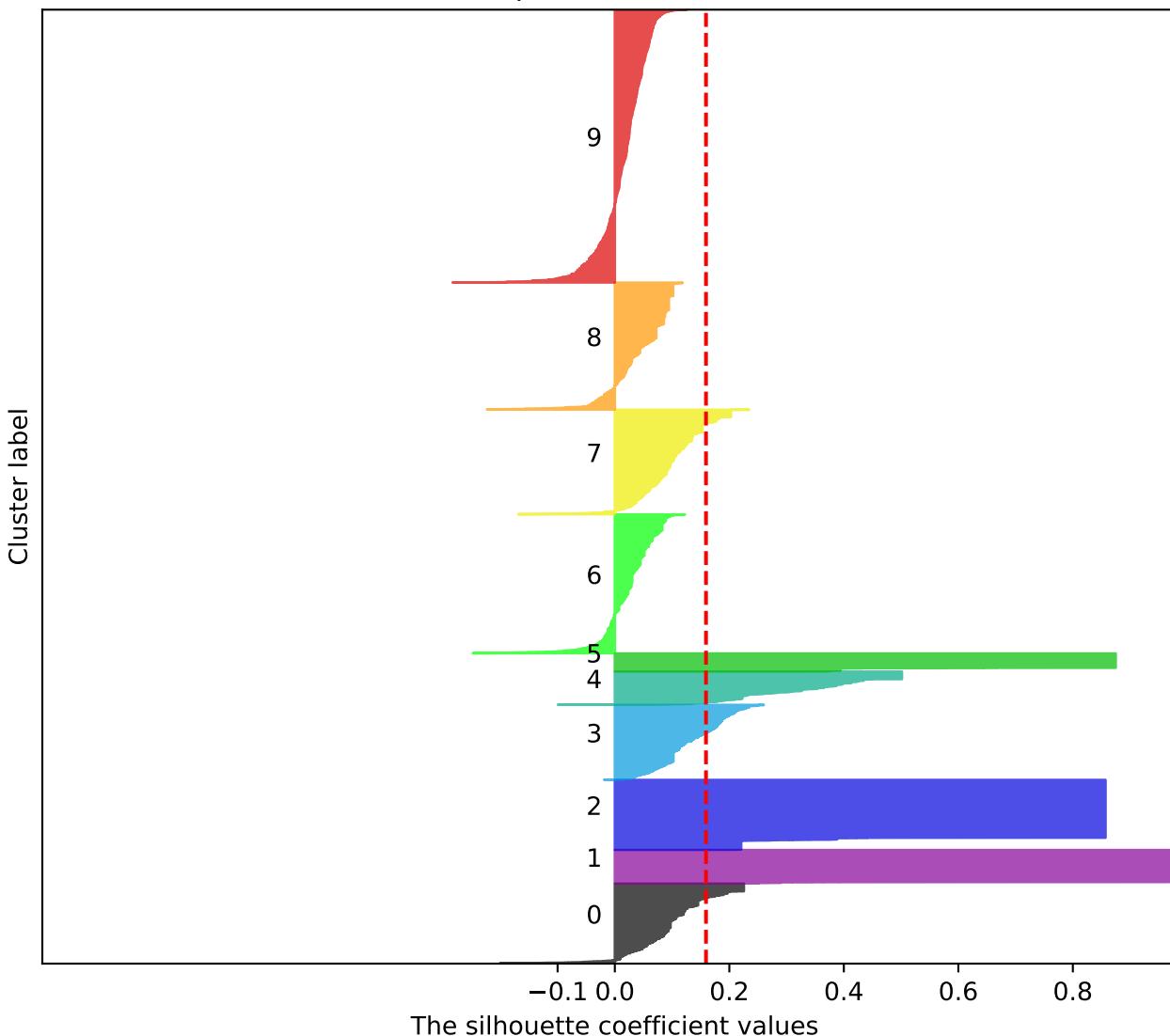


The visualization of the clustered data.

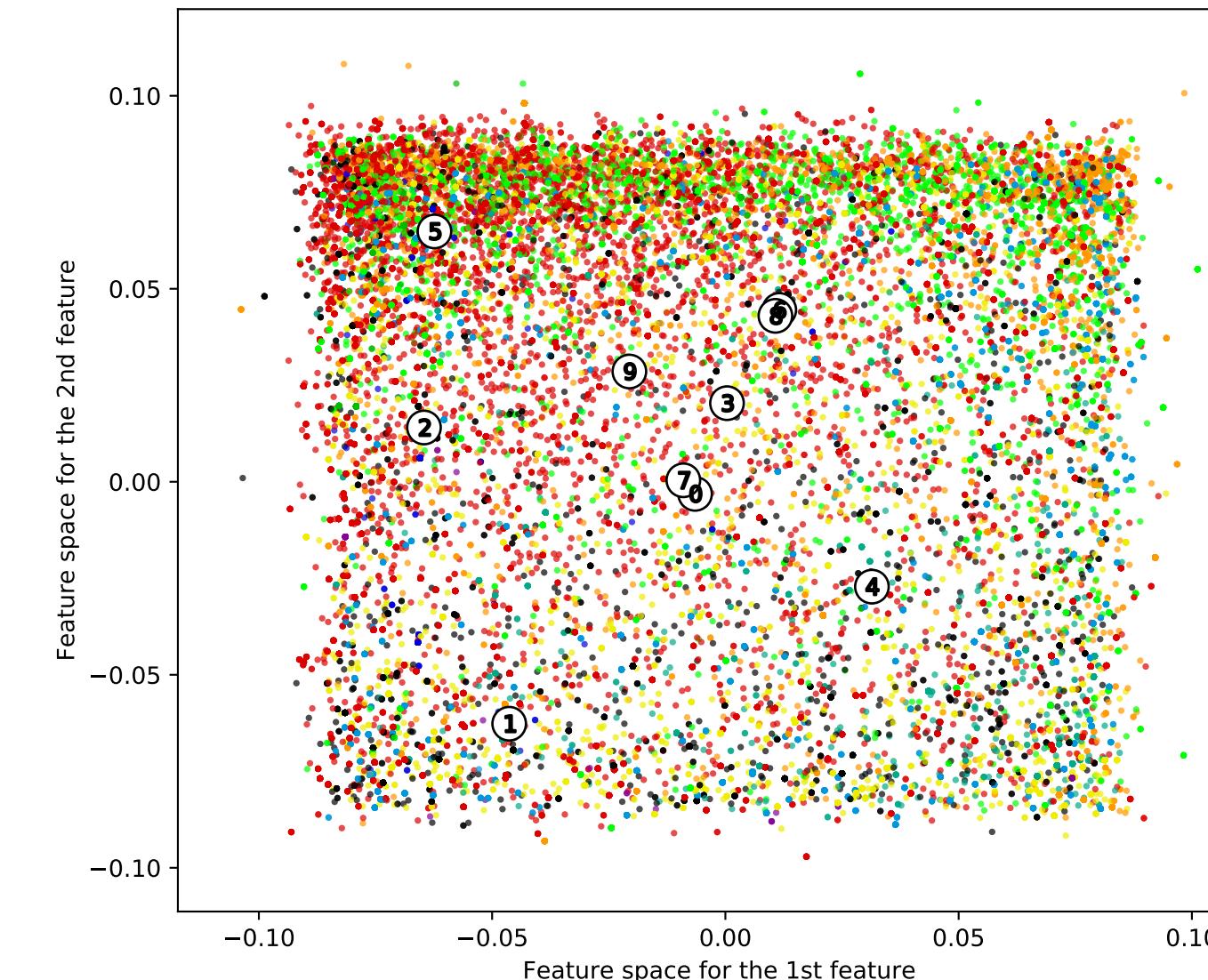


Silhouette analysis for KMeans clustering on sample data with n_clusters = 10 with Average Silhouette of: 0.15925905108451843

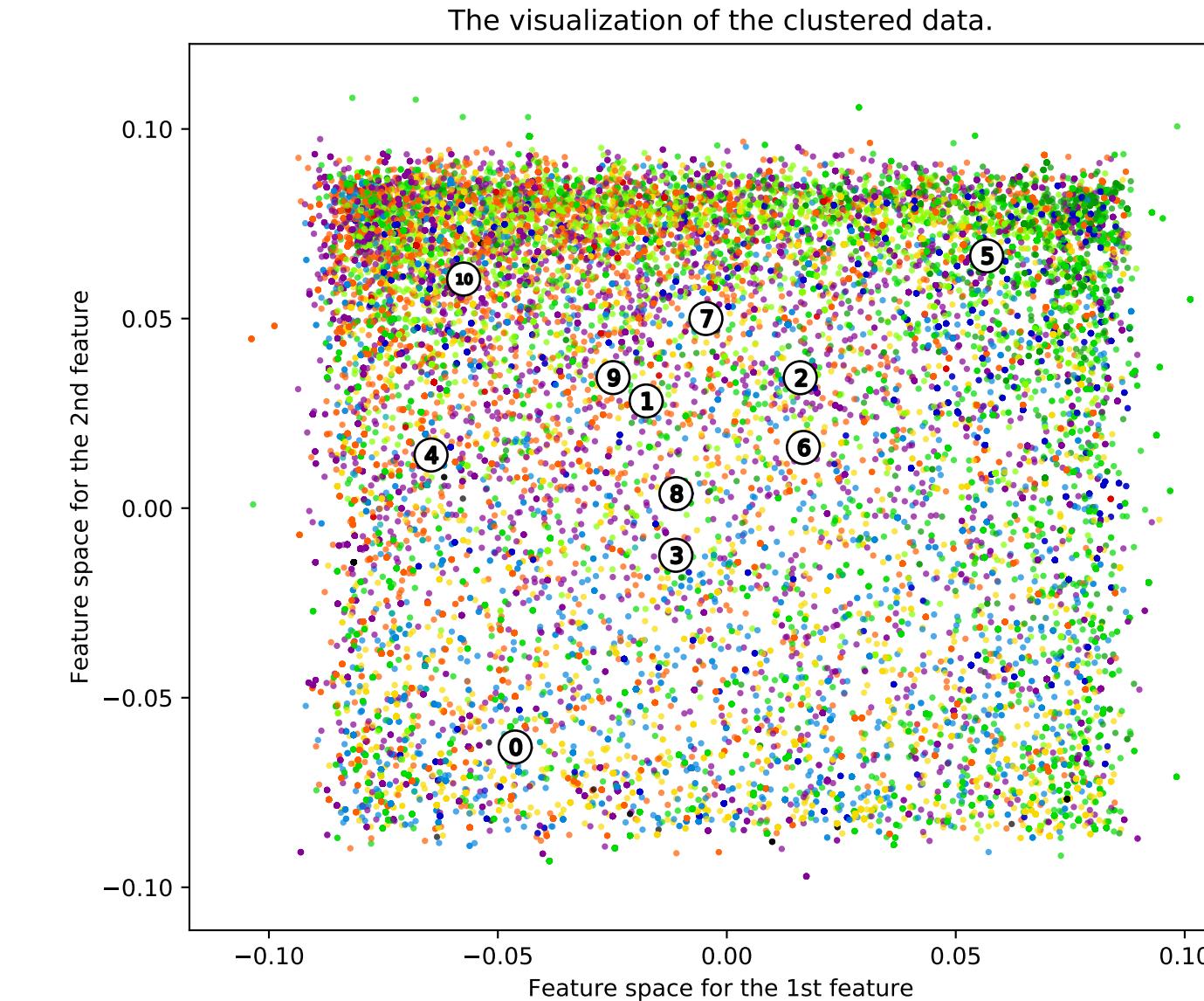
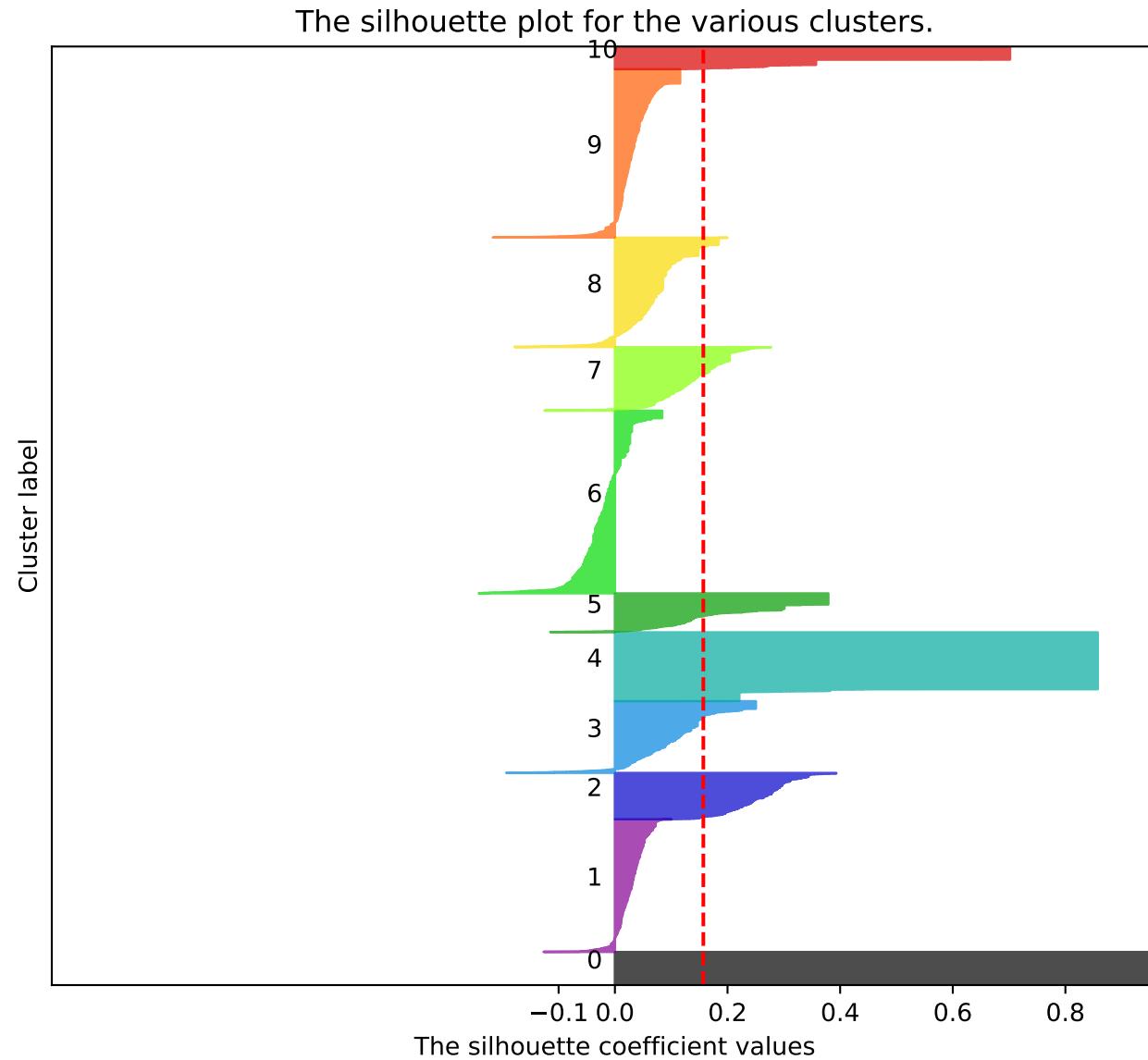
The silhouette plot for the various clusters.



The visualization of the clustered data.

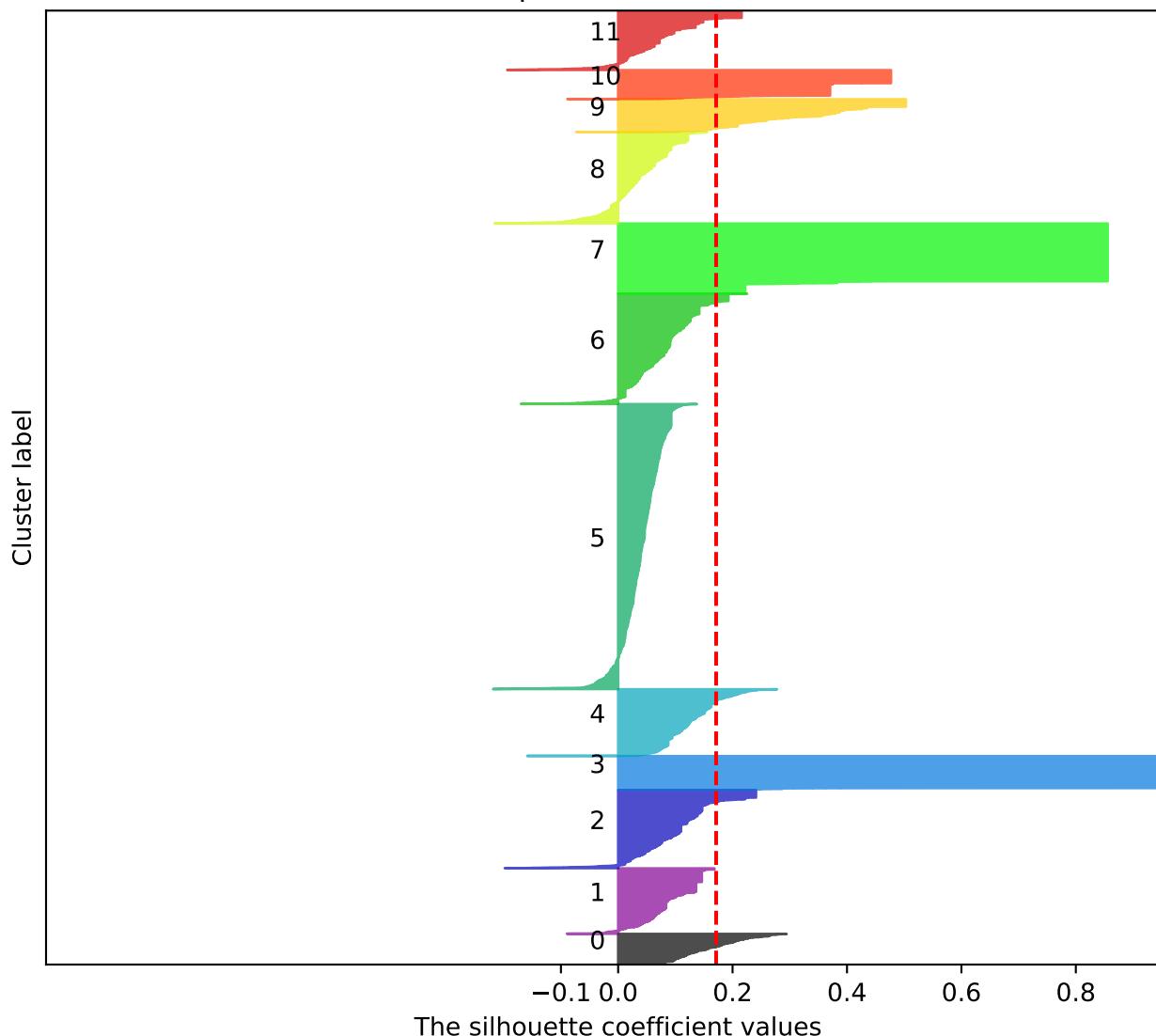


Silhouette analysis for KMeans clustering on sample data with n_clusters = 11 with Average Silhouette of: 0.15704473853111267

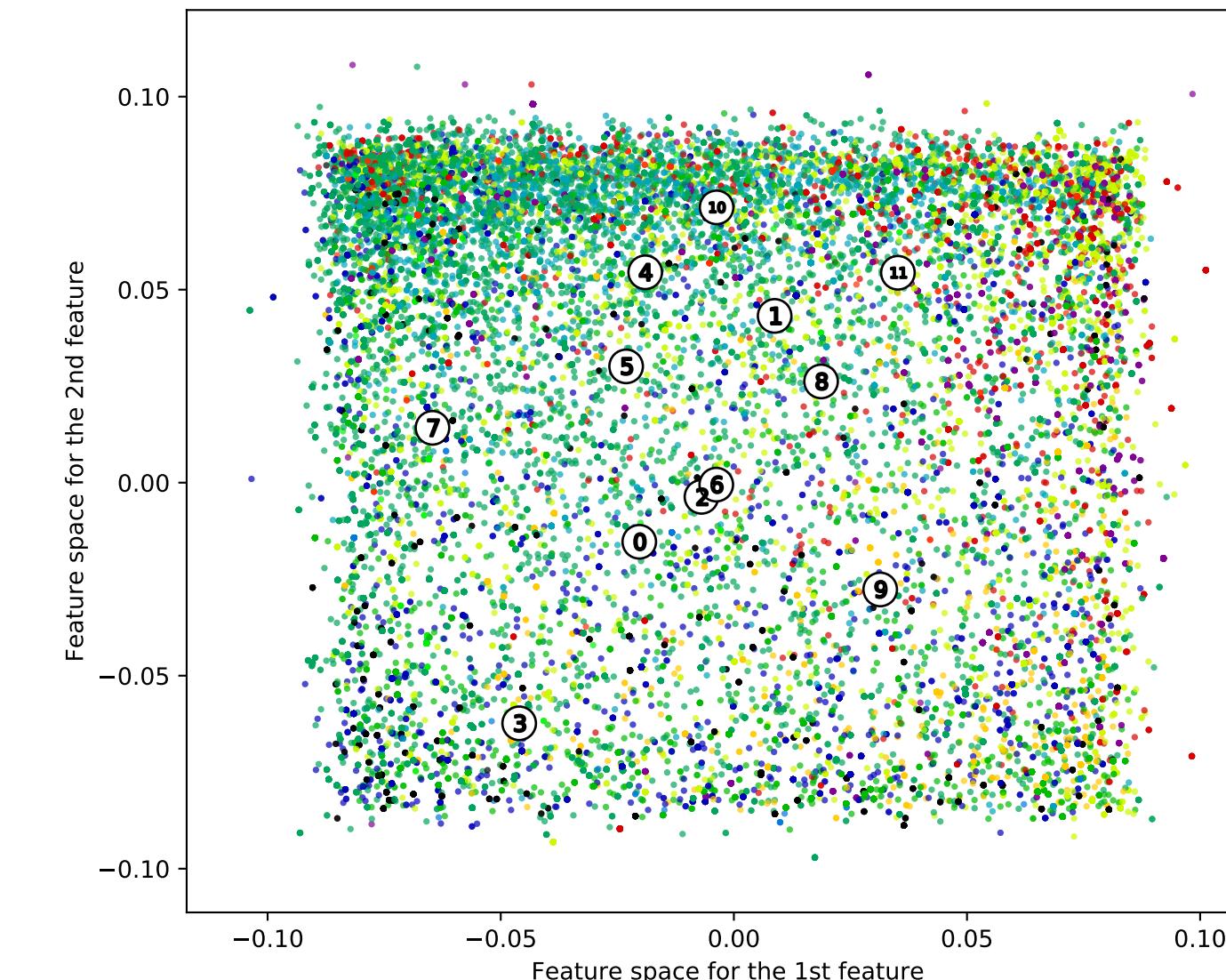


Silhouette analysis for KMeans clustering on sample data with n_clusters = 12 with Average Silhouette of: 0.1712457835674286

The silhouette plot for the various clusters.

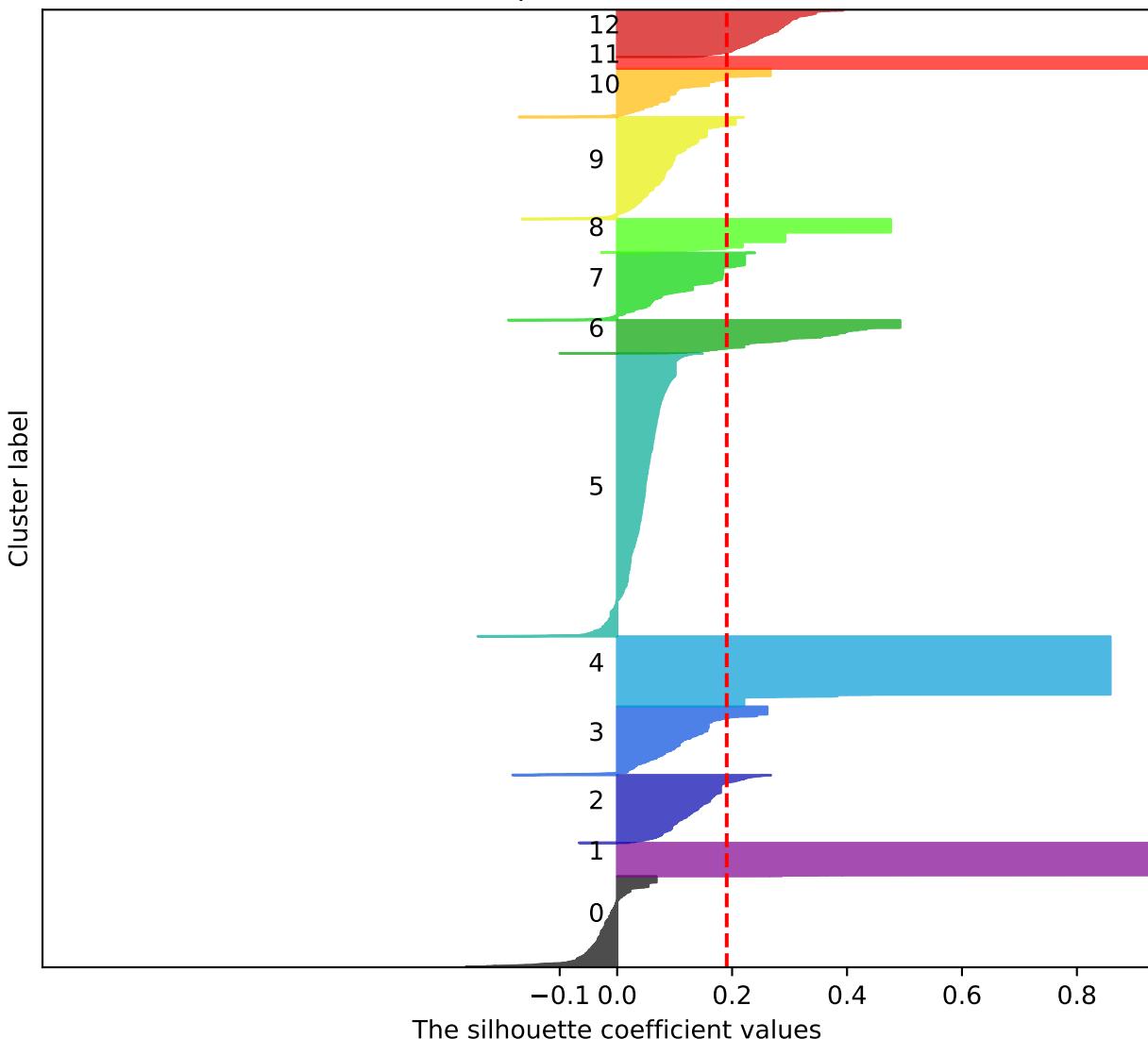


The visualization of the clustered data.

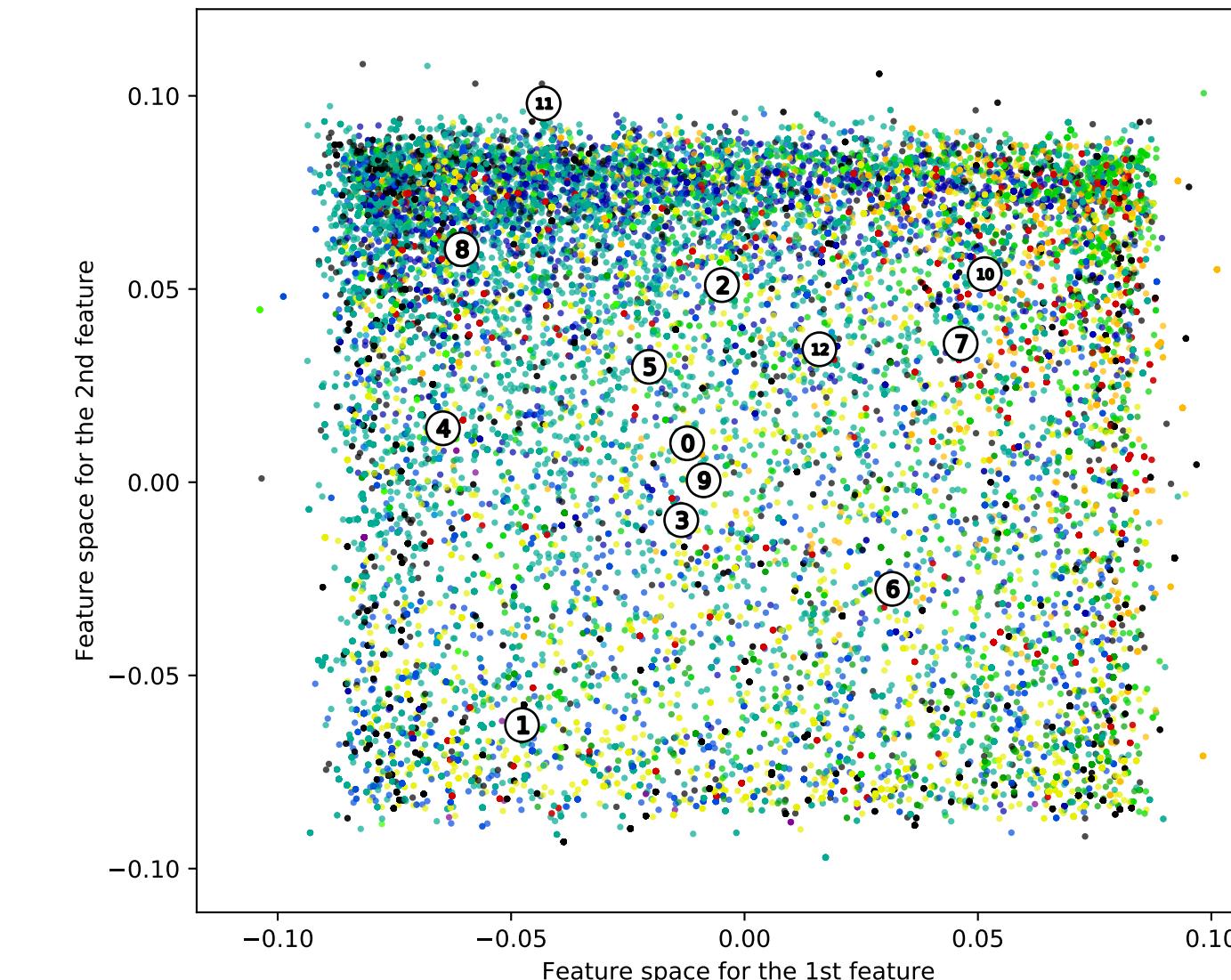


Silhouette analysis for KMeans clustering on sample data with n_clusters = 13 with Average Silhouette of: 0.19066645205020905

The silhouette plot for the various clusters.

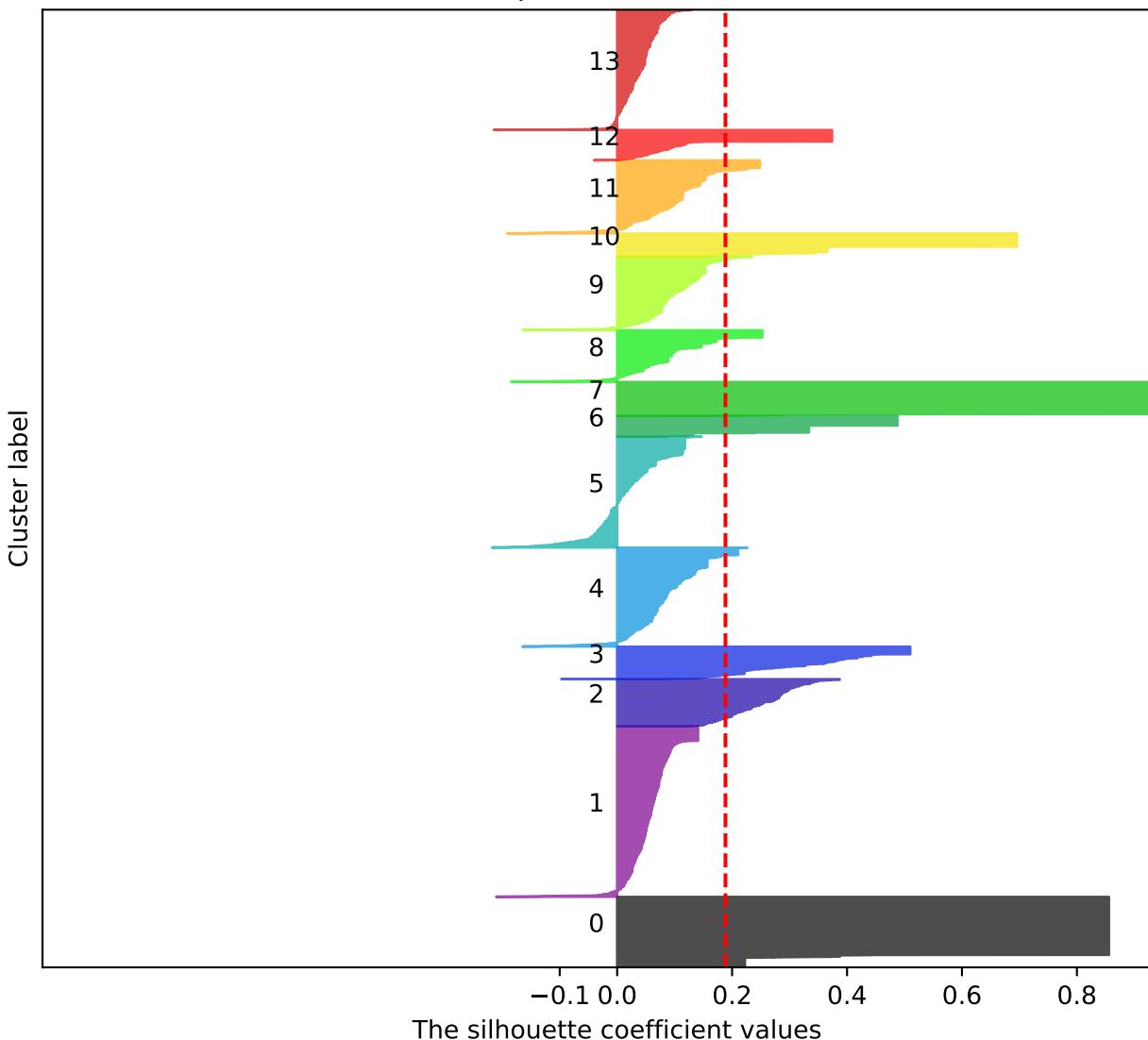


The visualization of the clustered data.

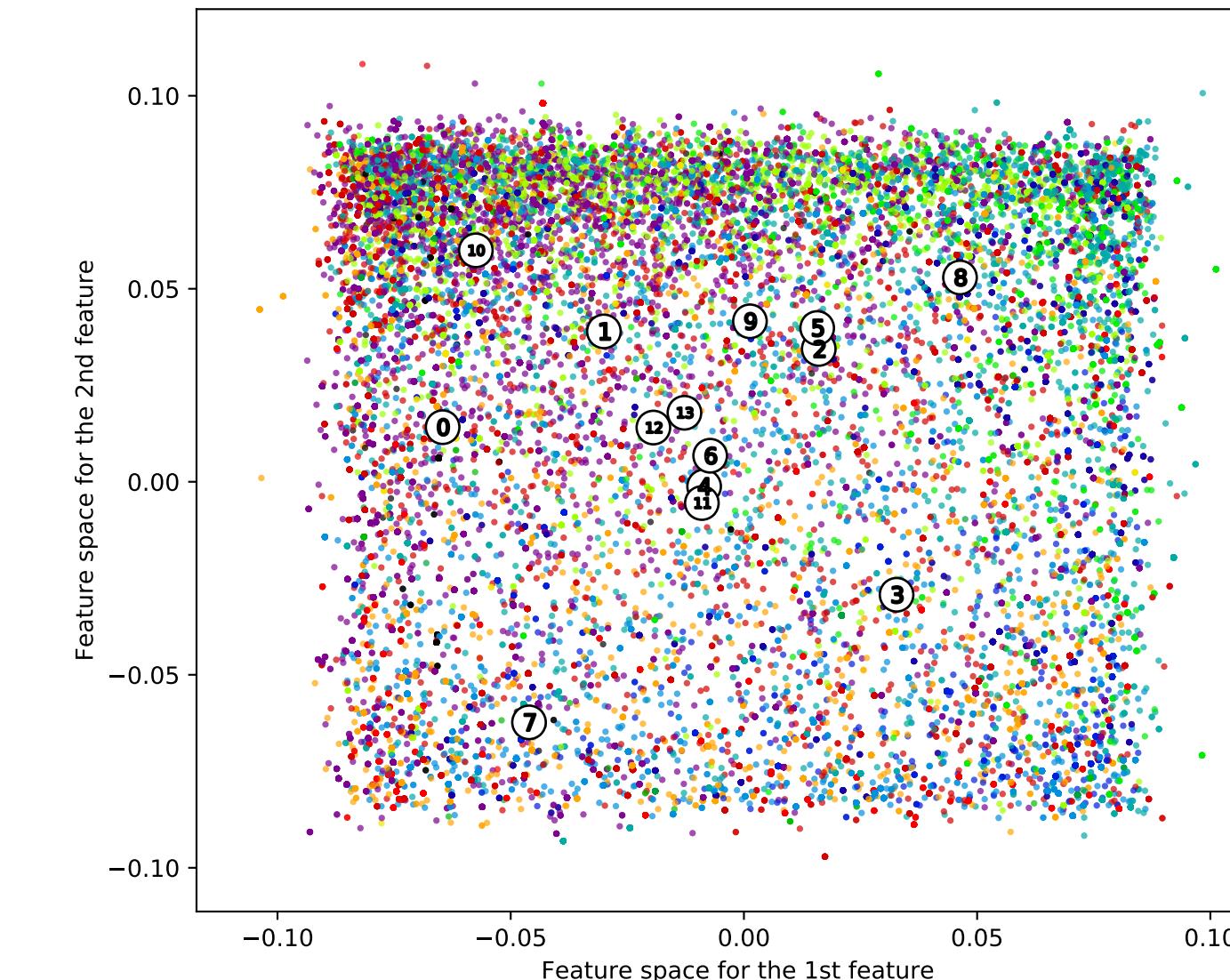


Silhouette analysis for KMeans clustering on sample data with n_clusters = 14 with Average Silhouette of: 0.1884346306324005

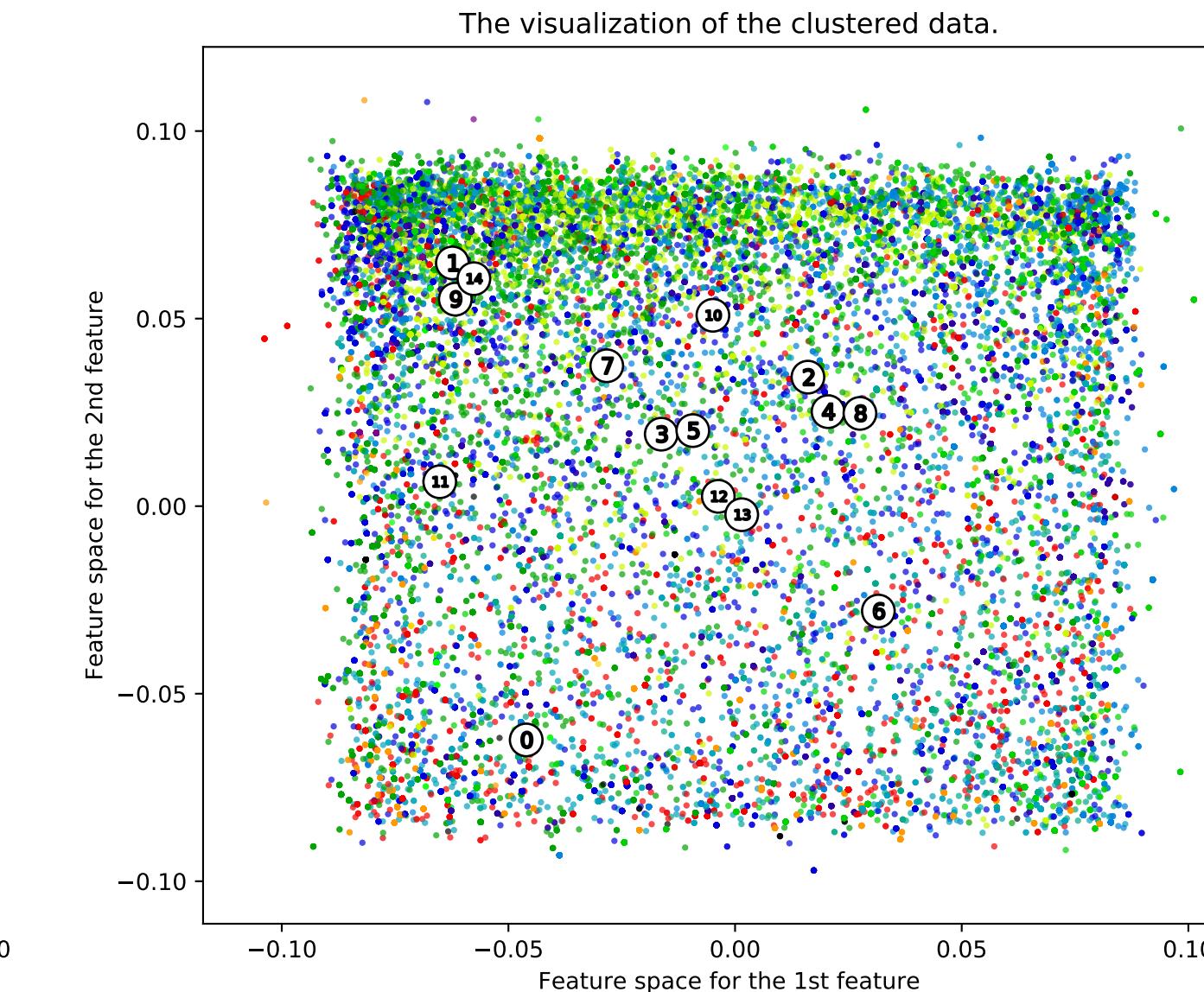
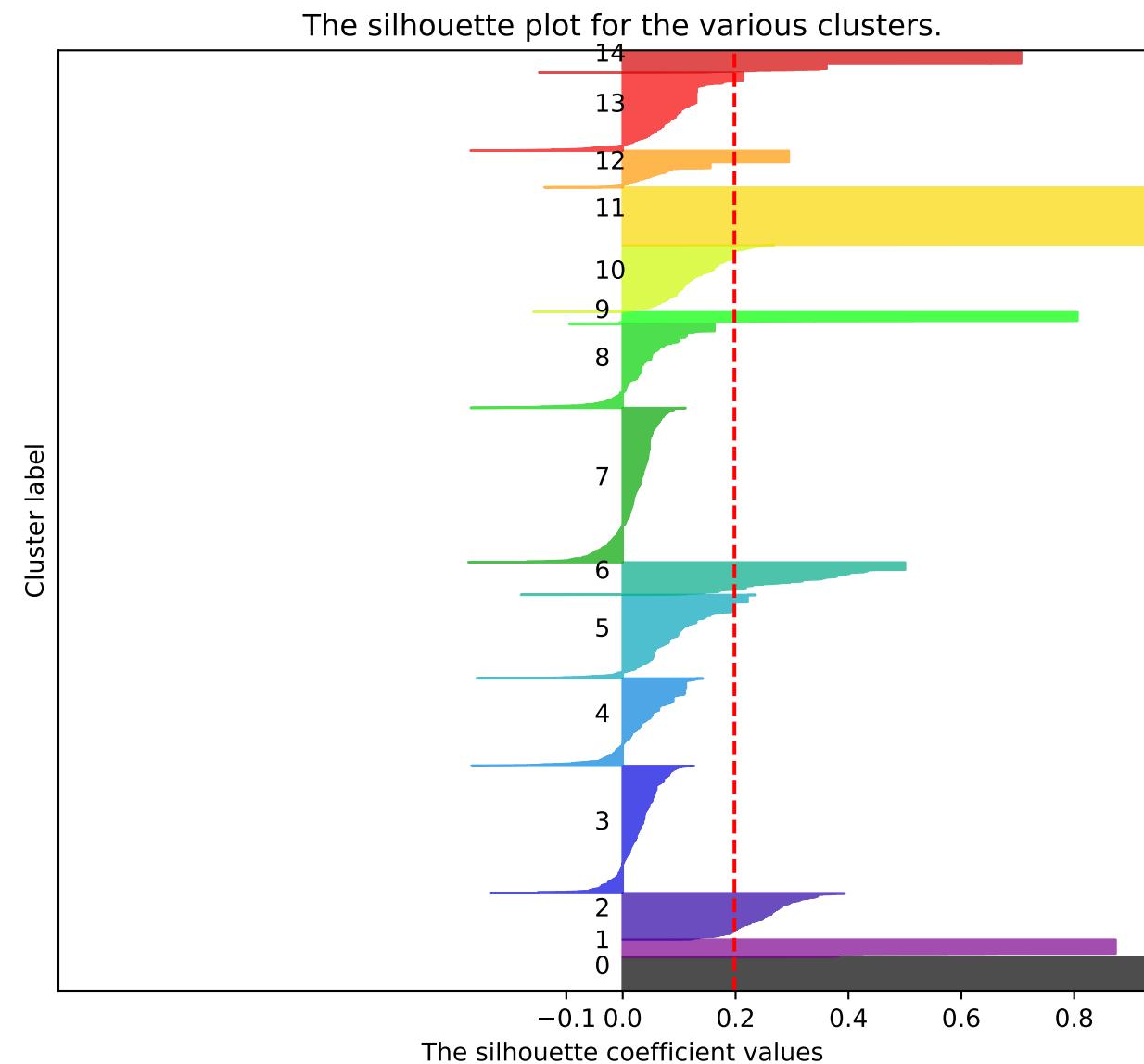
The silhouette plot for the various clusters.



The visualization of the clustered data.

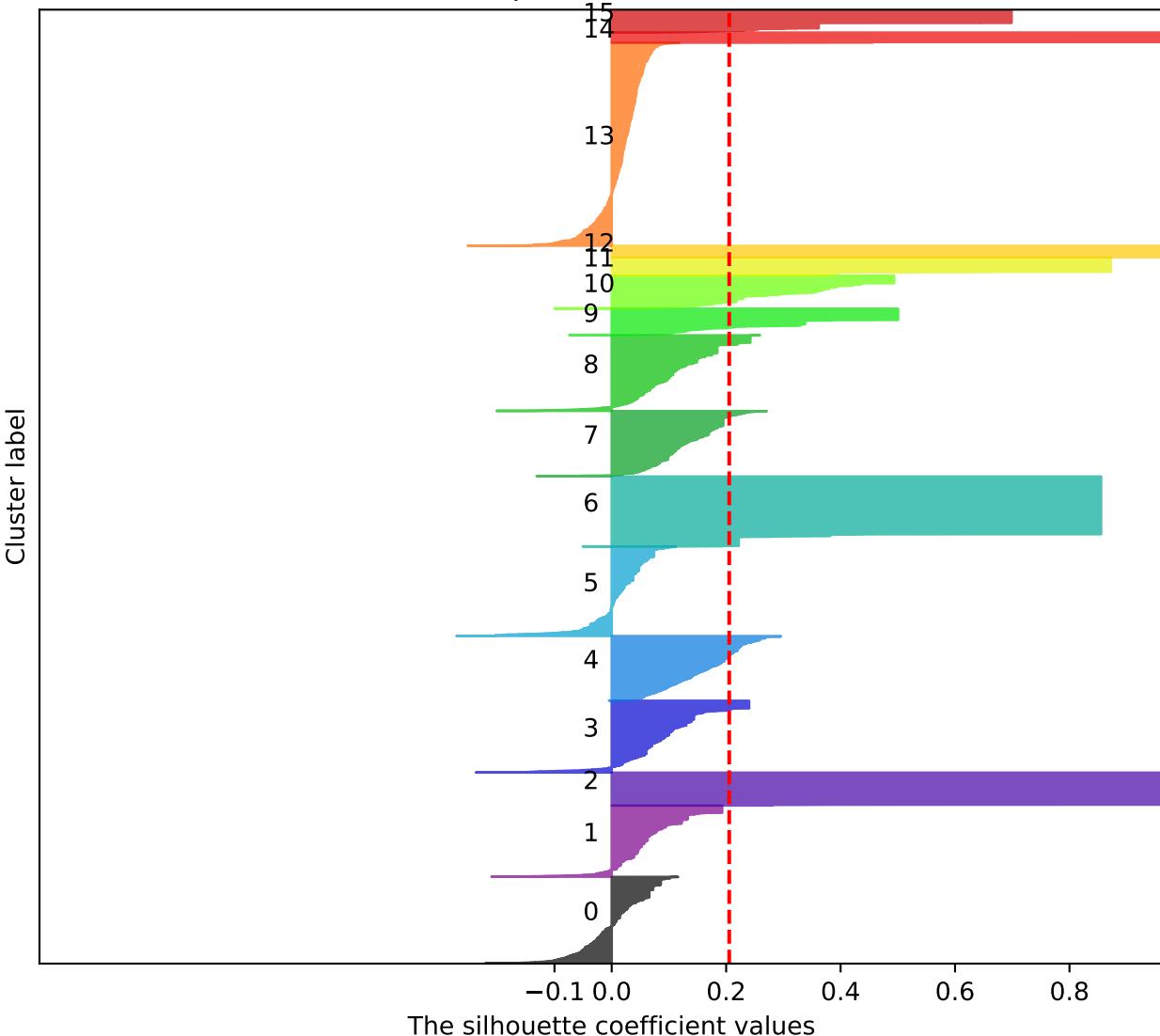


Silhouette analysis for KMeans clustering on sample data with n_clusters = 15 with Average Silhouette of: 0.1979316920042038

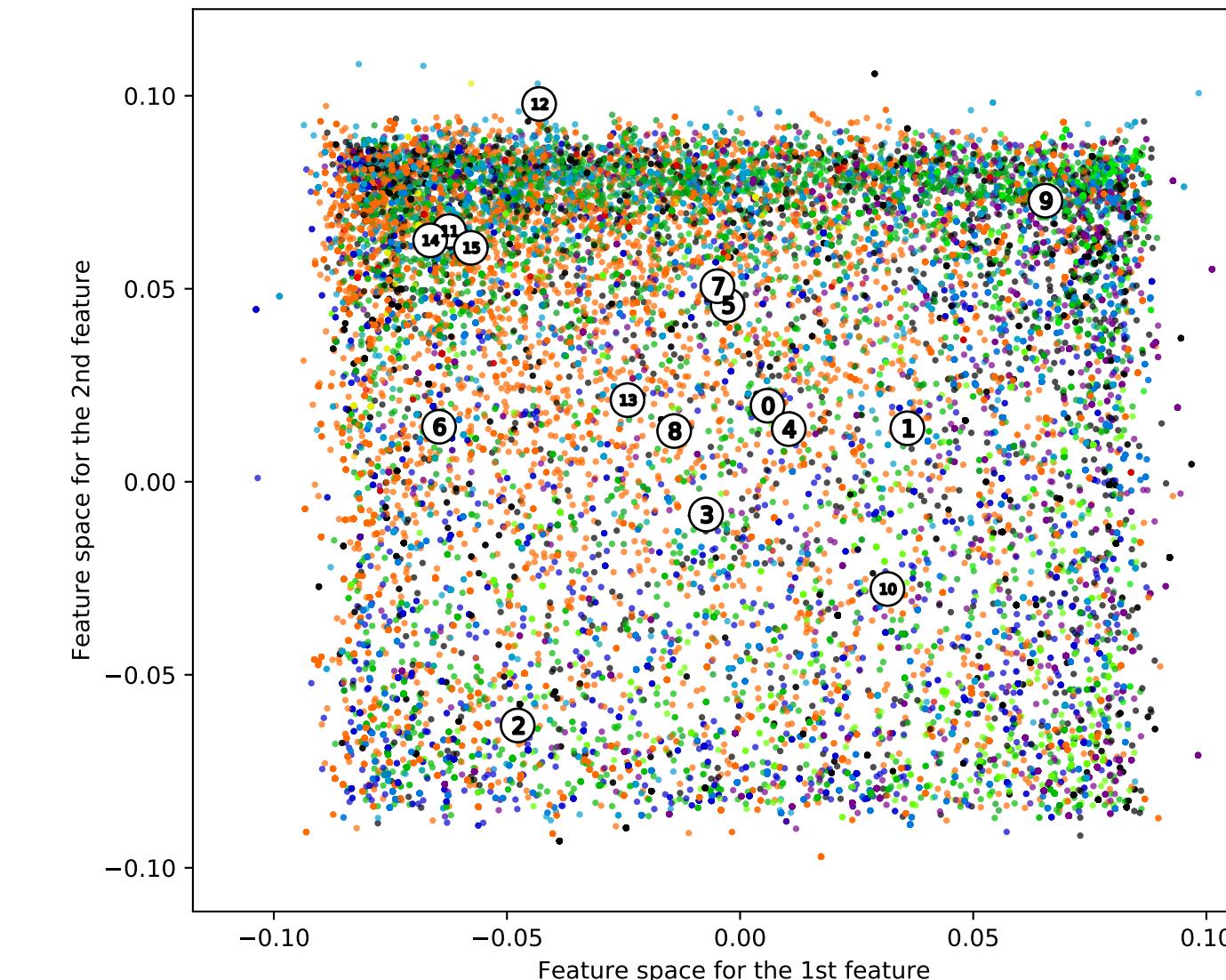


Silhouette analysis for KMeans clustering on sample data with n_clusters = 16 with Average Silhouette of: 0.20537908375263214

The silhouette plot for the various clusters.

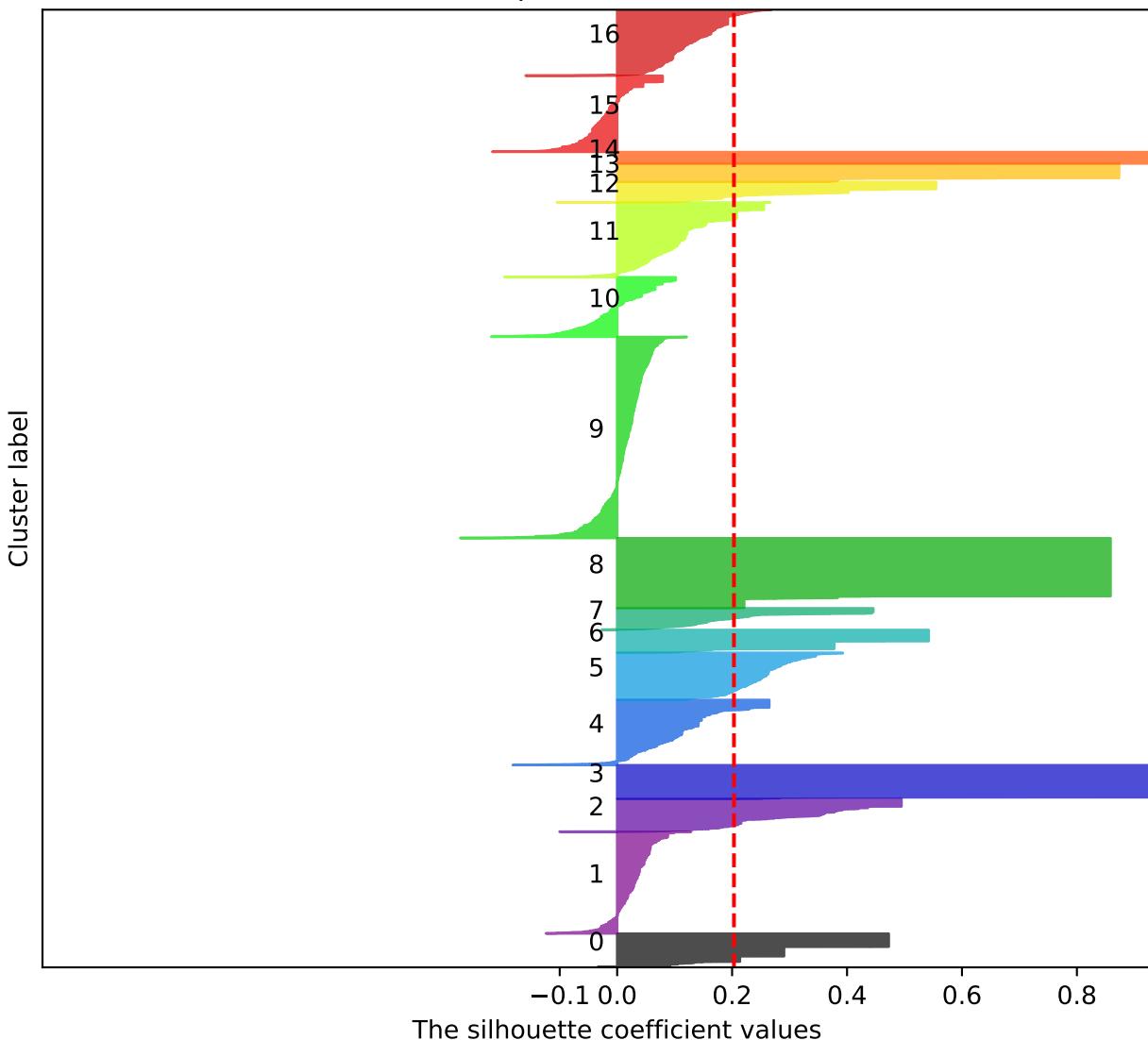


The visualization of the clustered data.

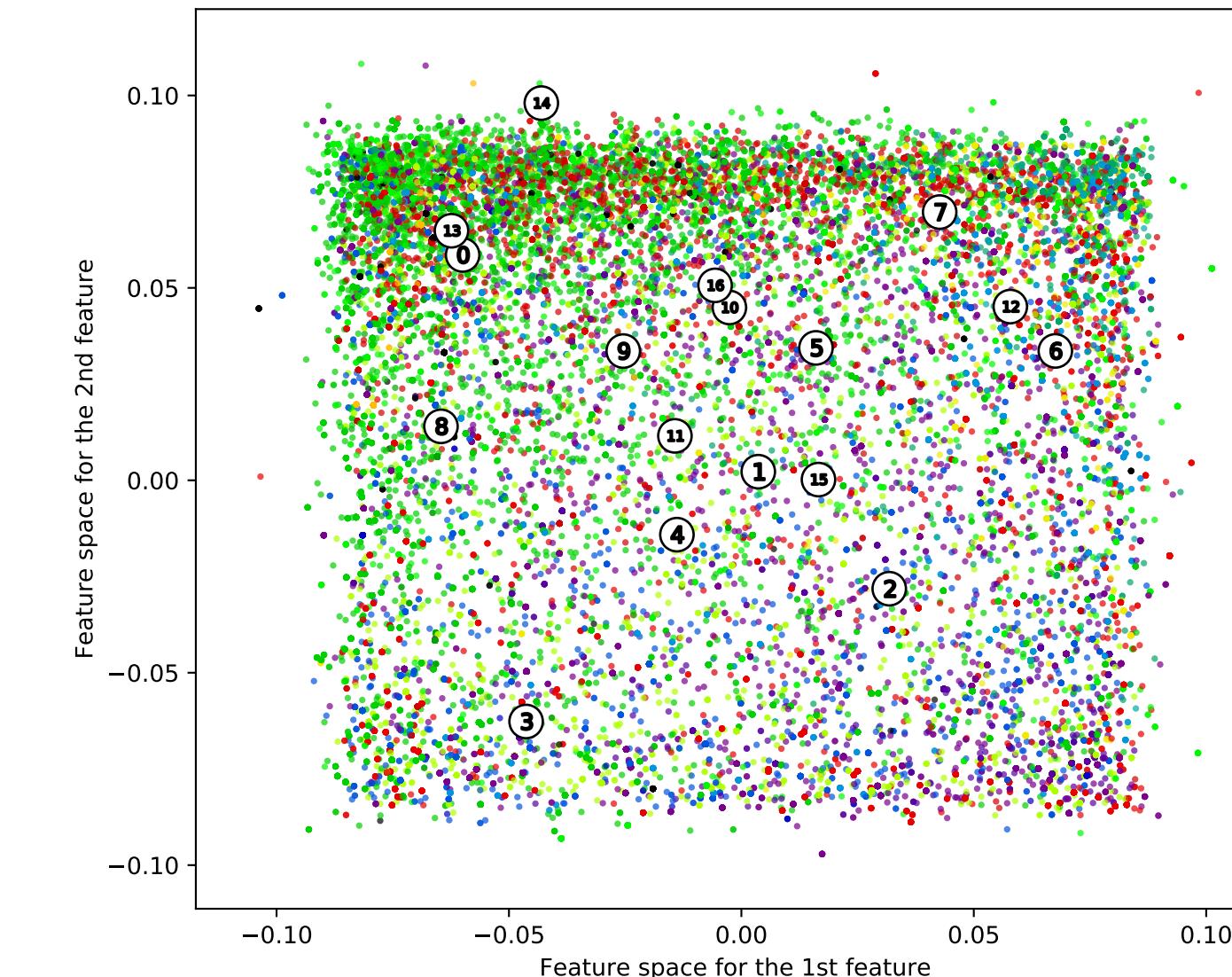


Silhouette analysis for KMeans clustering on sample data with n_clusters = 17 with Average Silhouette of: 0.2032100111246109

The silhouette plot for the various clusters.

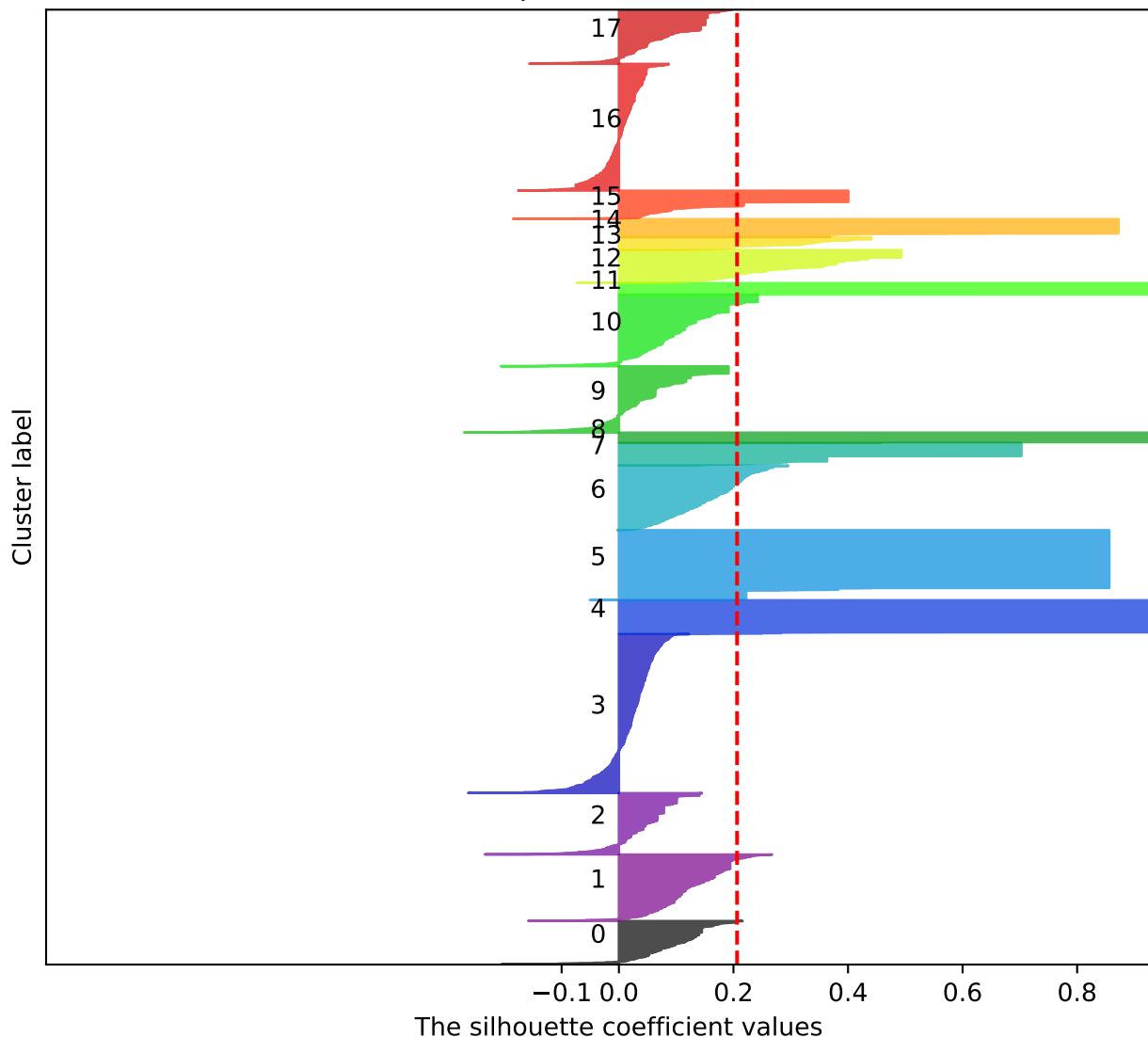


The visualization of the clustered data.

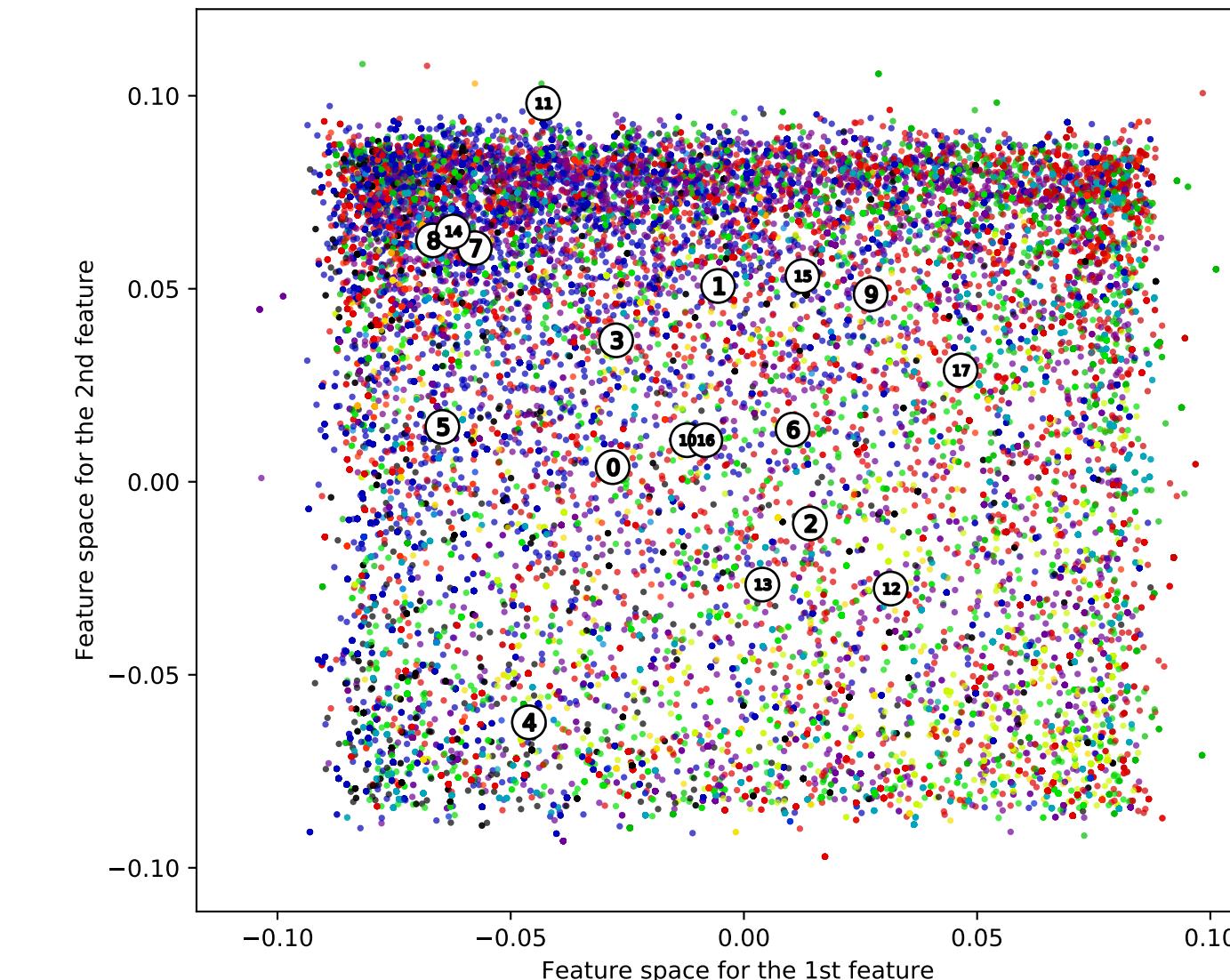


Silhouette analysis for KMeans clustering on sample data with n_clusters = 18 with Average Silhouette of: 0.206299290060997

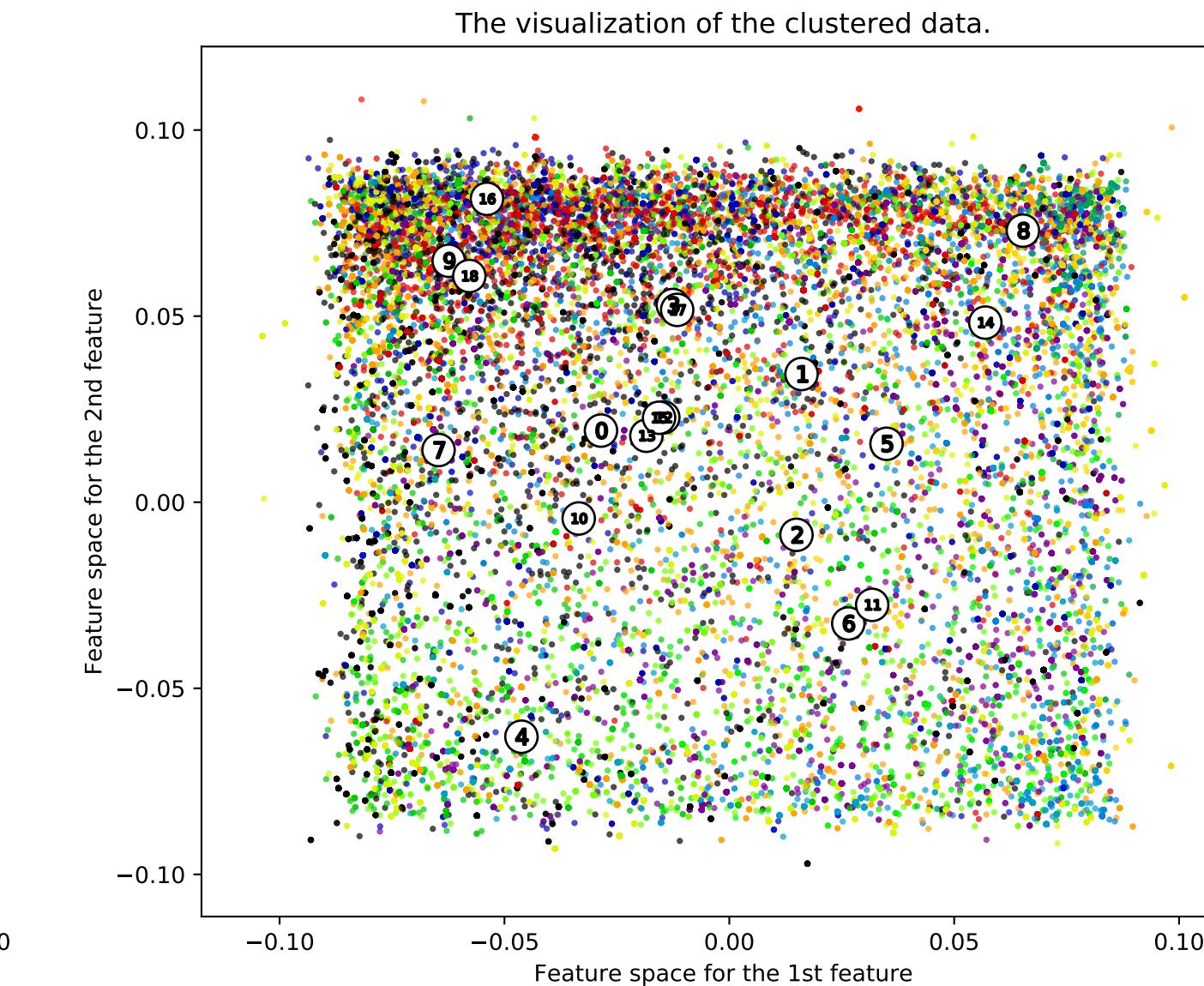
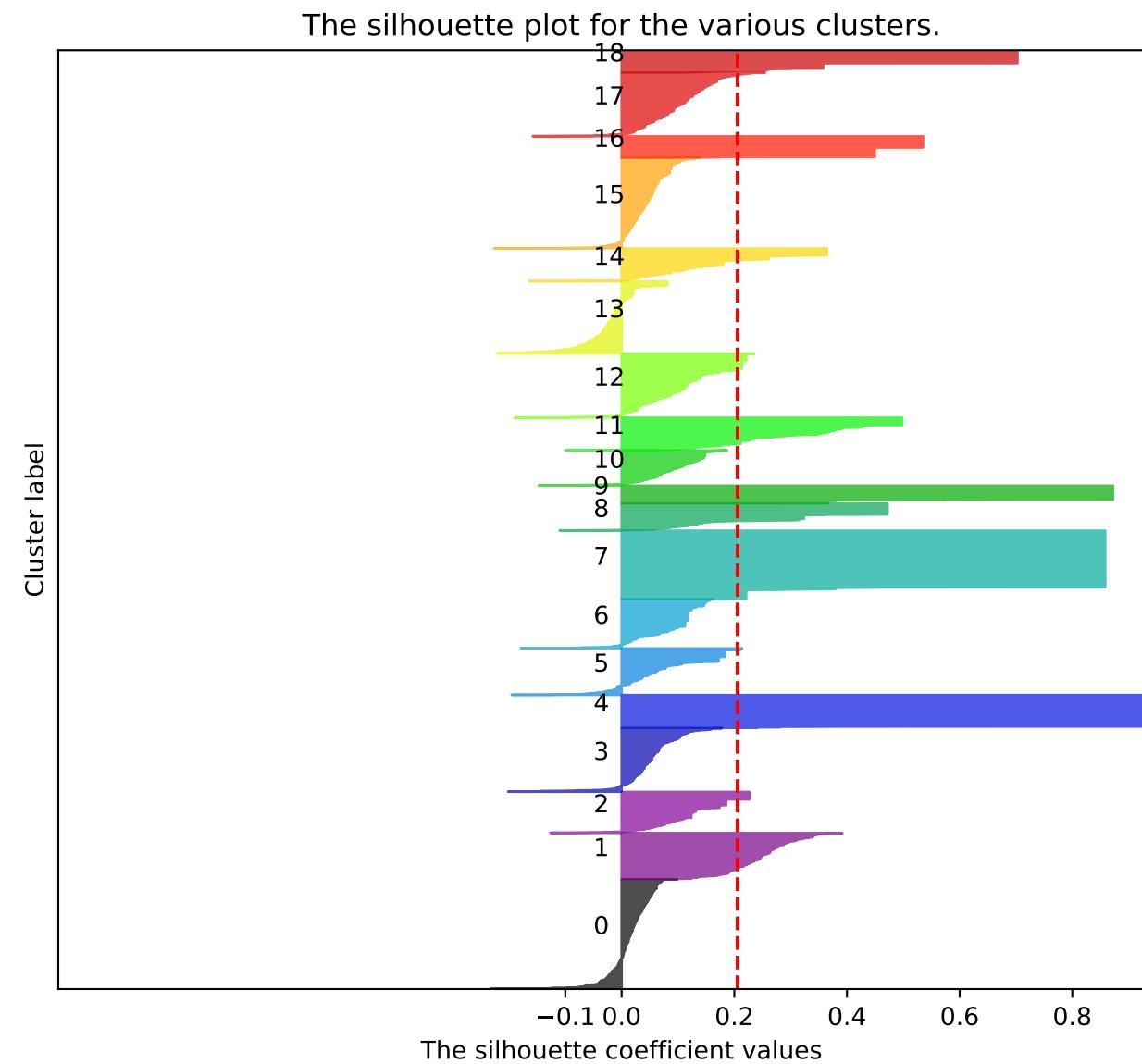
The silhouette plot for the various clusters.



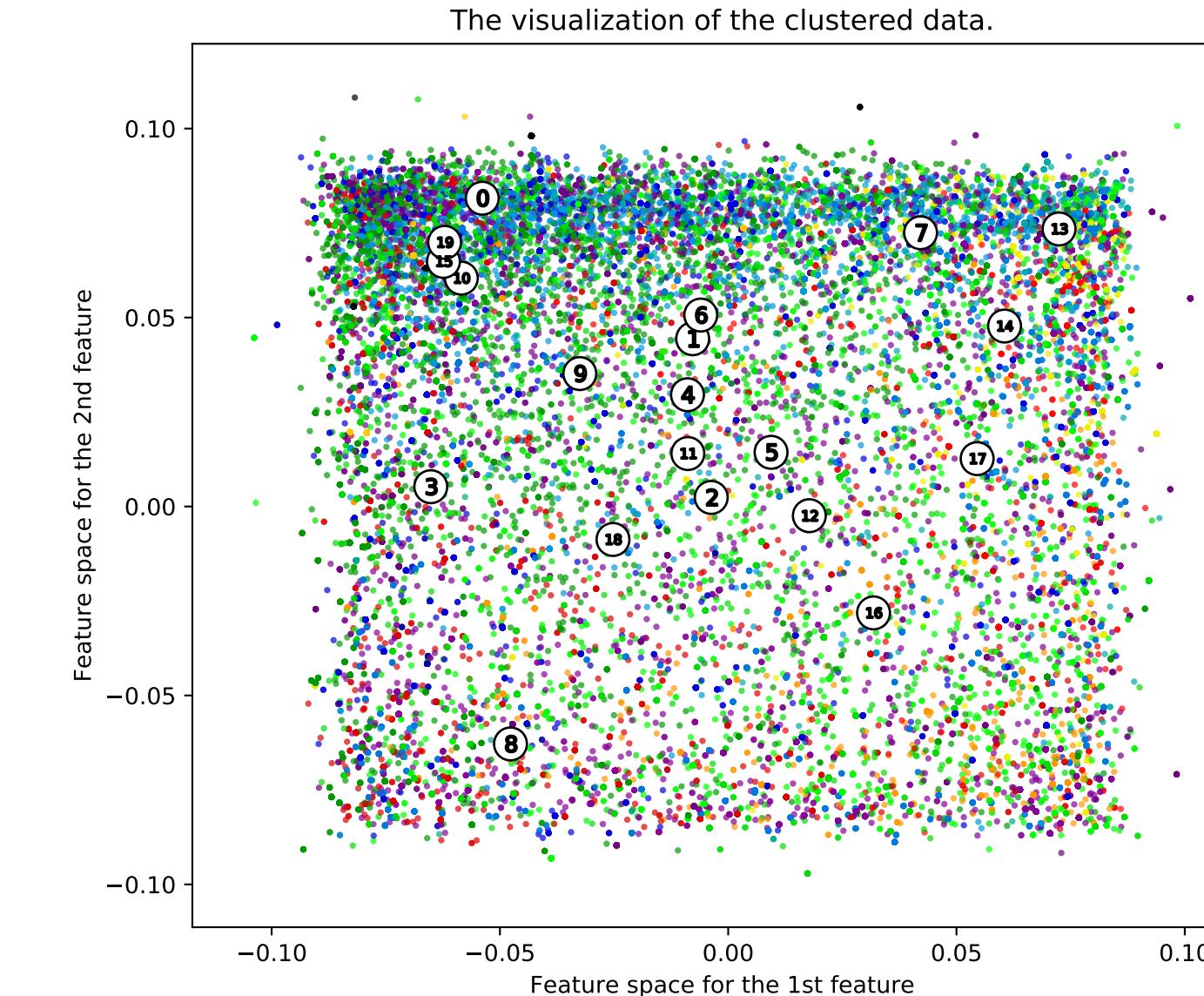
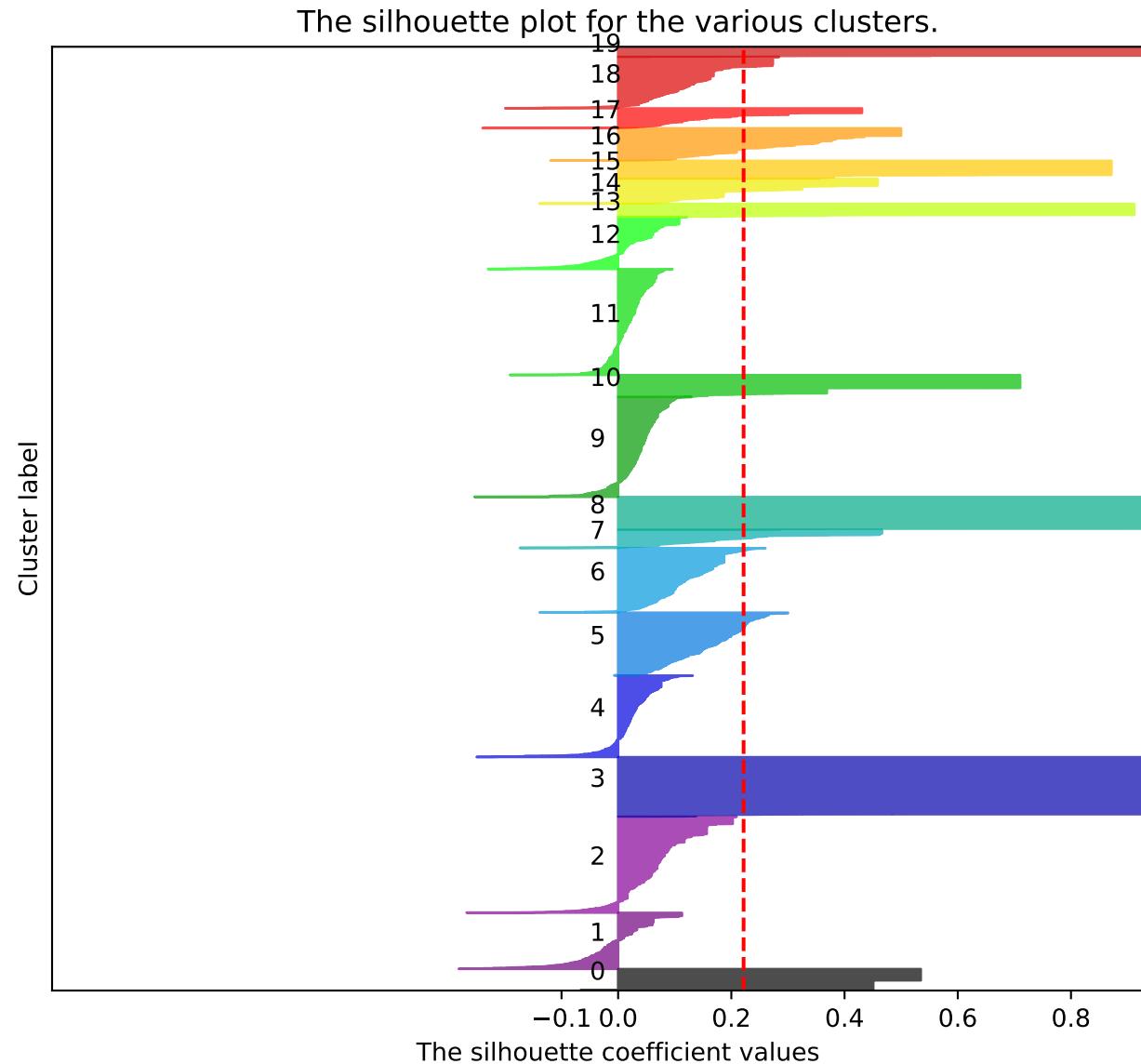
The visualization of the clustered data.



Silhouette analysis for KMeans clustering on sample data with n_clusters = 19 with Average Silhouette of: 0.2057528793811798

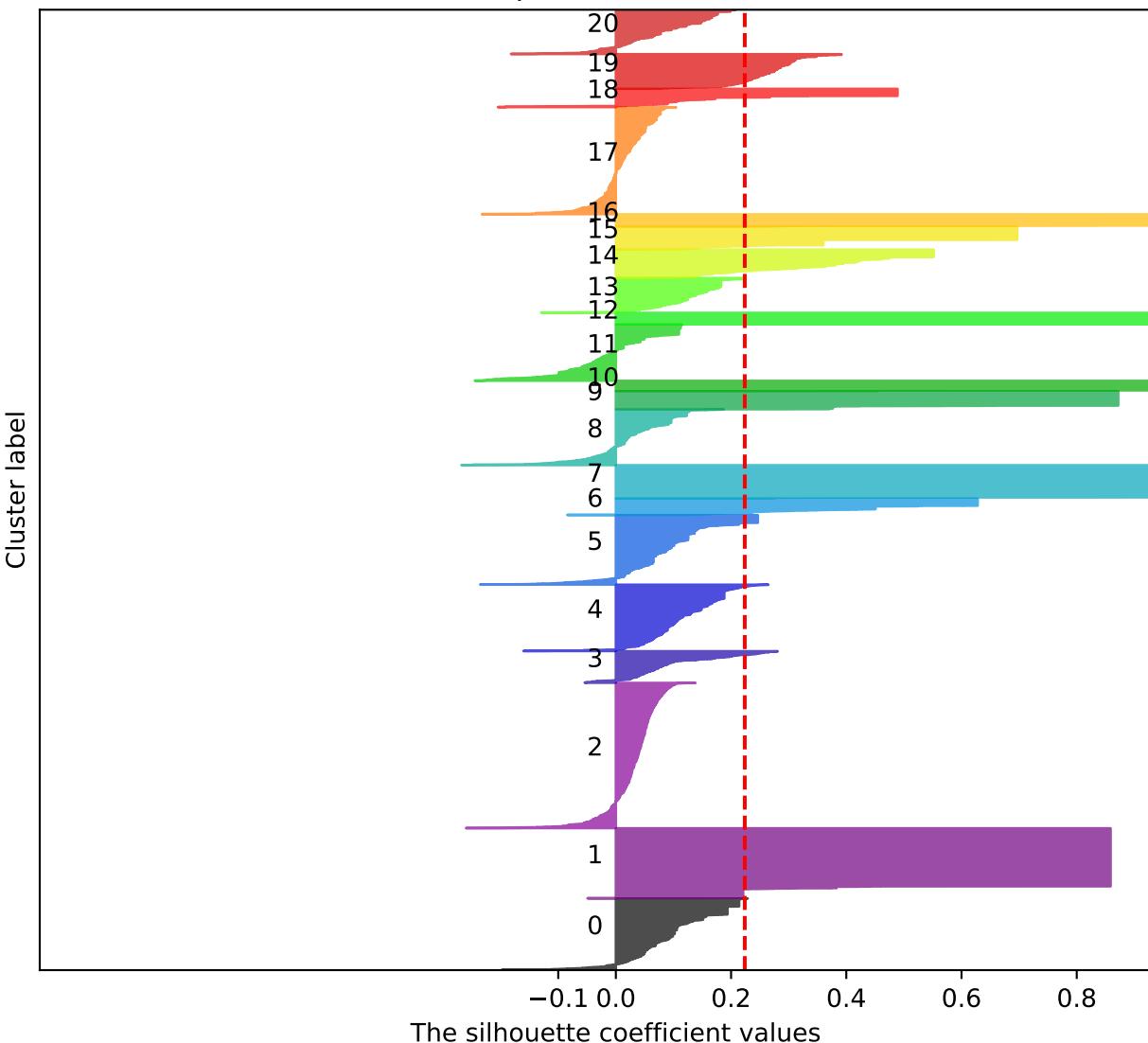


Silhouette analysis for KMeans clustering on sample data with n_clusters = 20 with Average Silhouette of: 0.22165115177631378

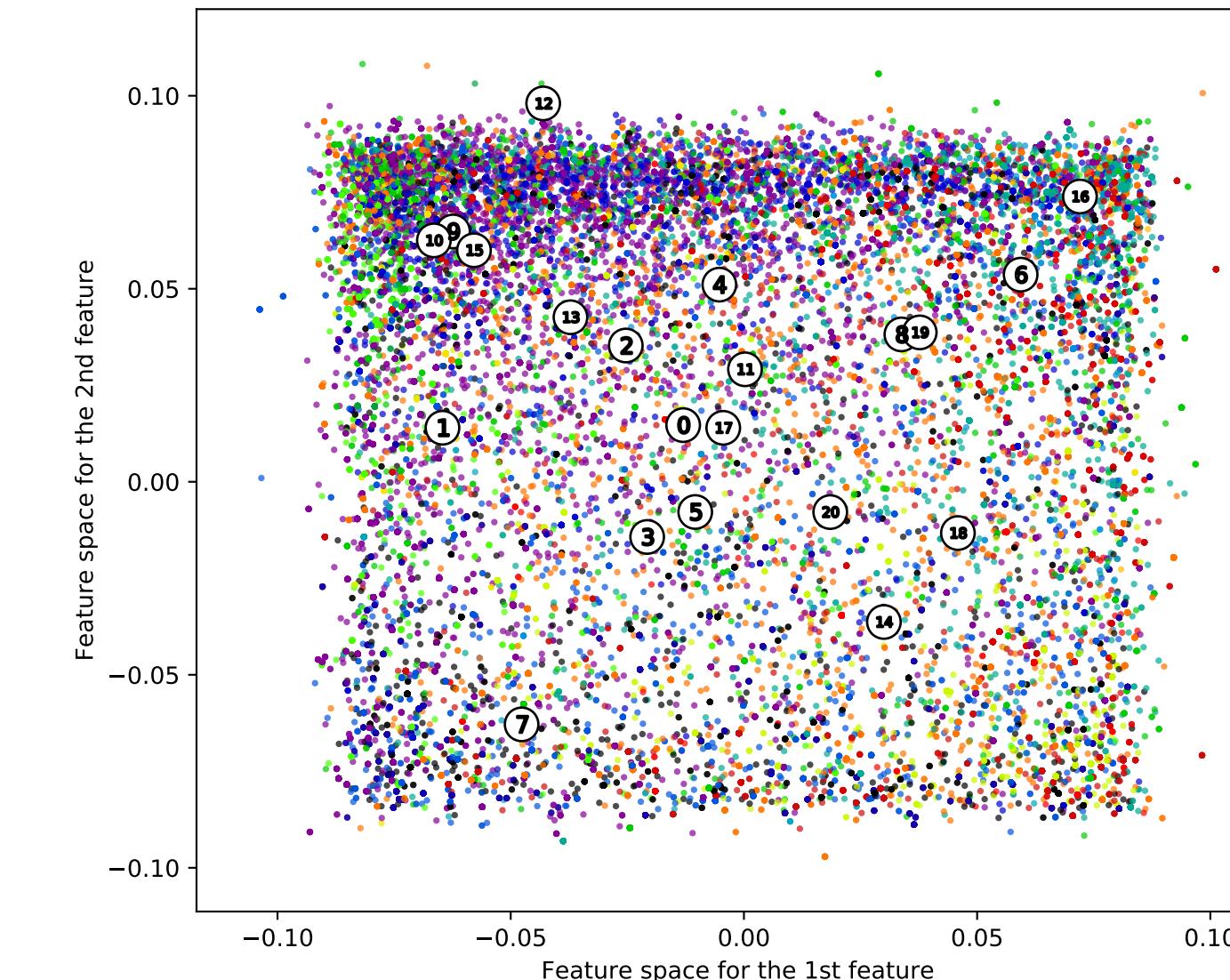


Silhouette analysis for KMeans clustering on sample data with n_clusters = 21 with Average Silhouette of: 0.22379063069820404

The silhouette plot for the various clusters.

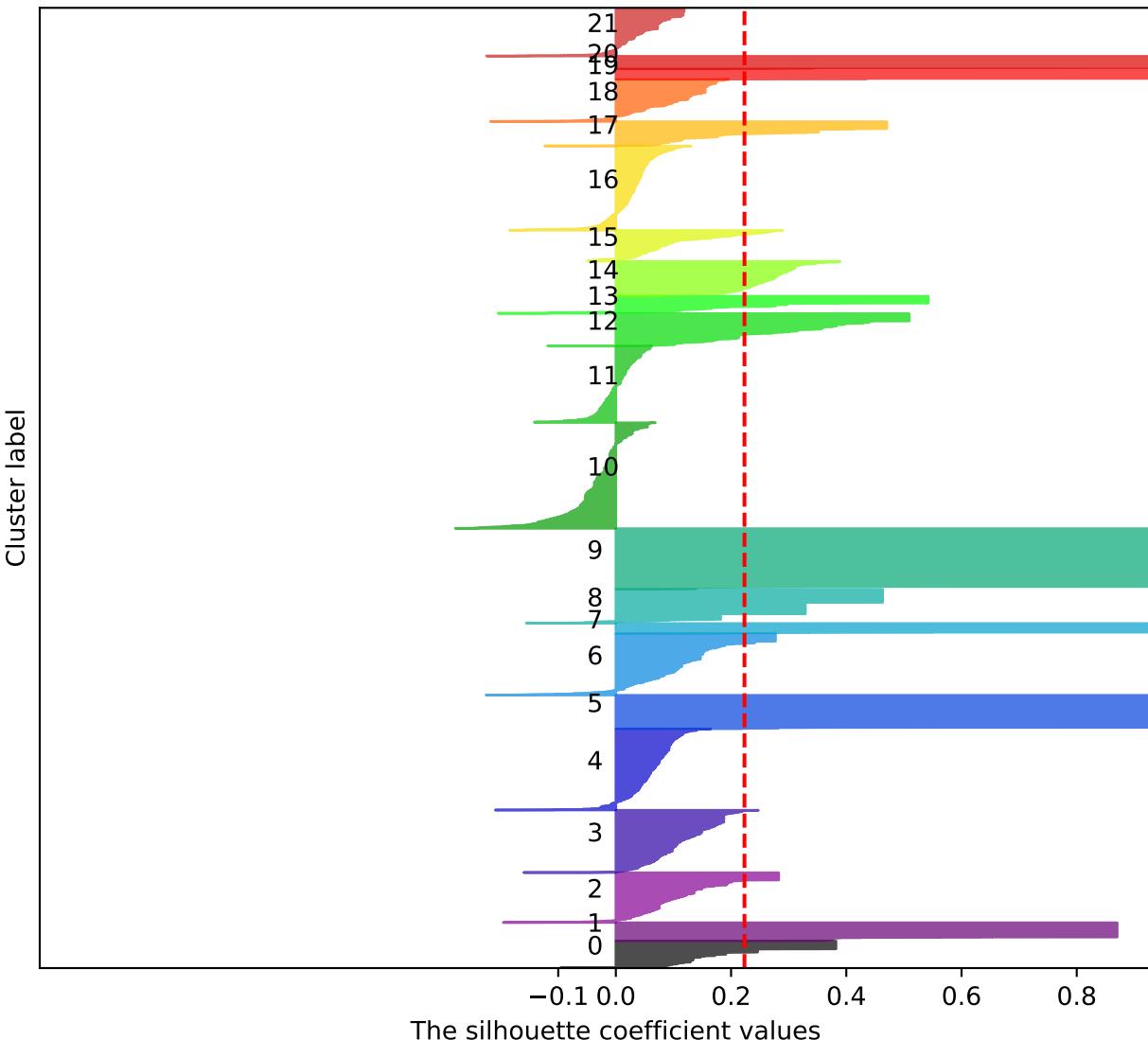


The visualization of the clustered data.

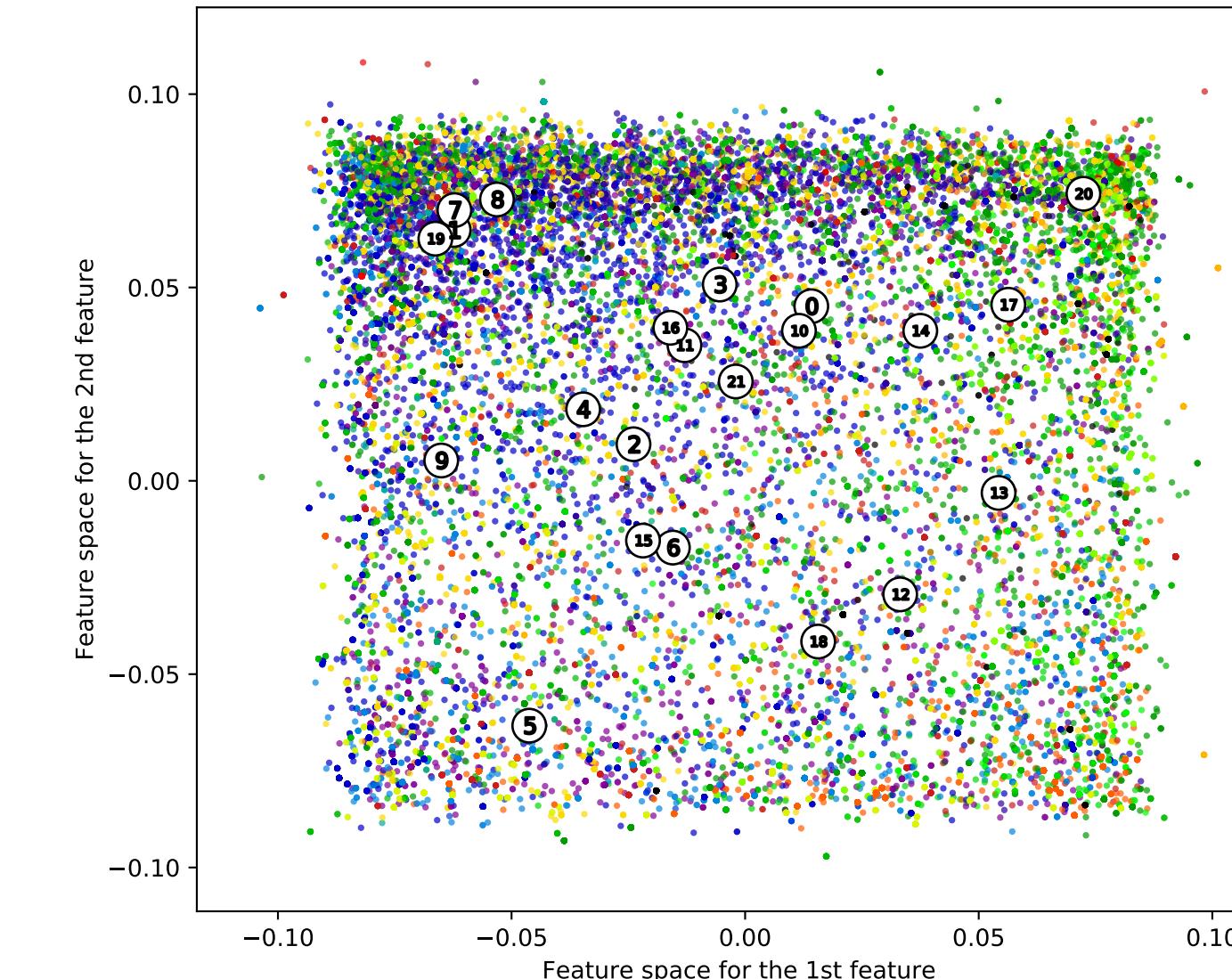


Silhouette analysis for KMeans clustering on sample data with n_clusters = 22 with Average Silhouette of: 0.2232874631881714

The silhouette plot for the various clusters.

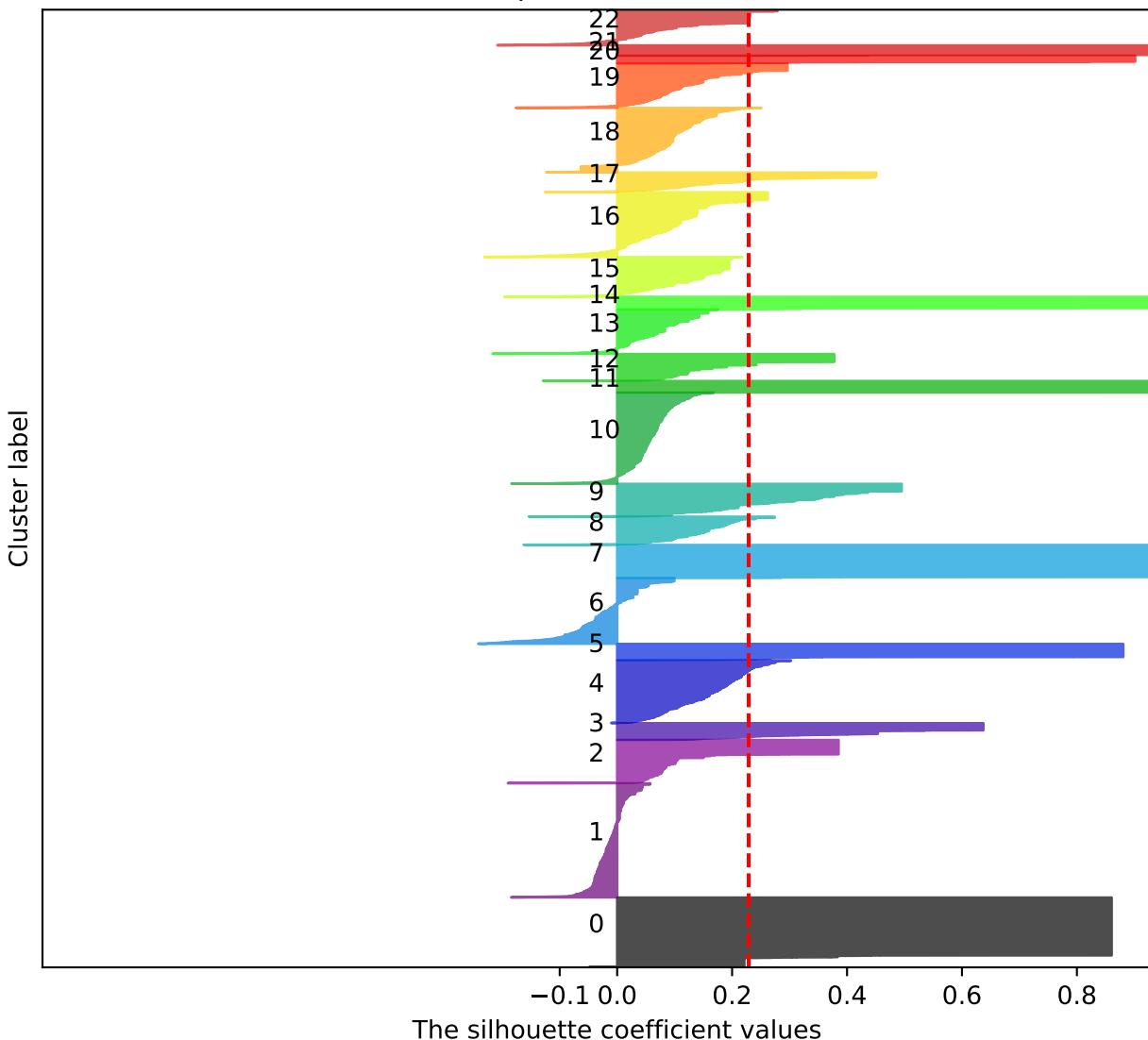


The visualization of the clustered data.

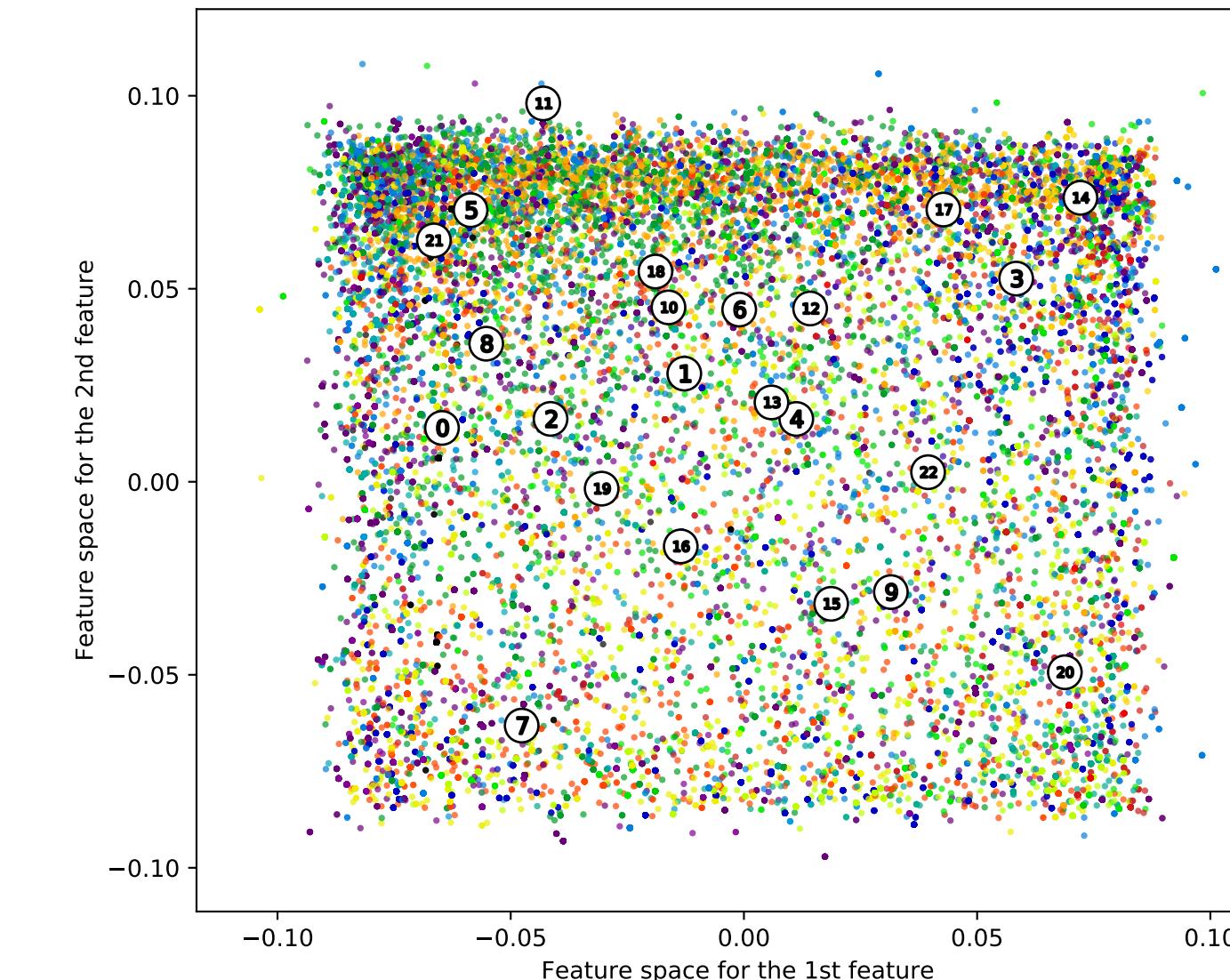


Silhouette analysis for KMeans clustering on sample data with n_clusters = 23 with Average Silhouette of: 0.22878767549991608

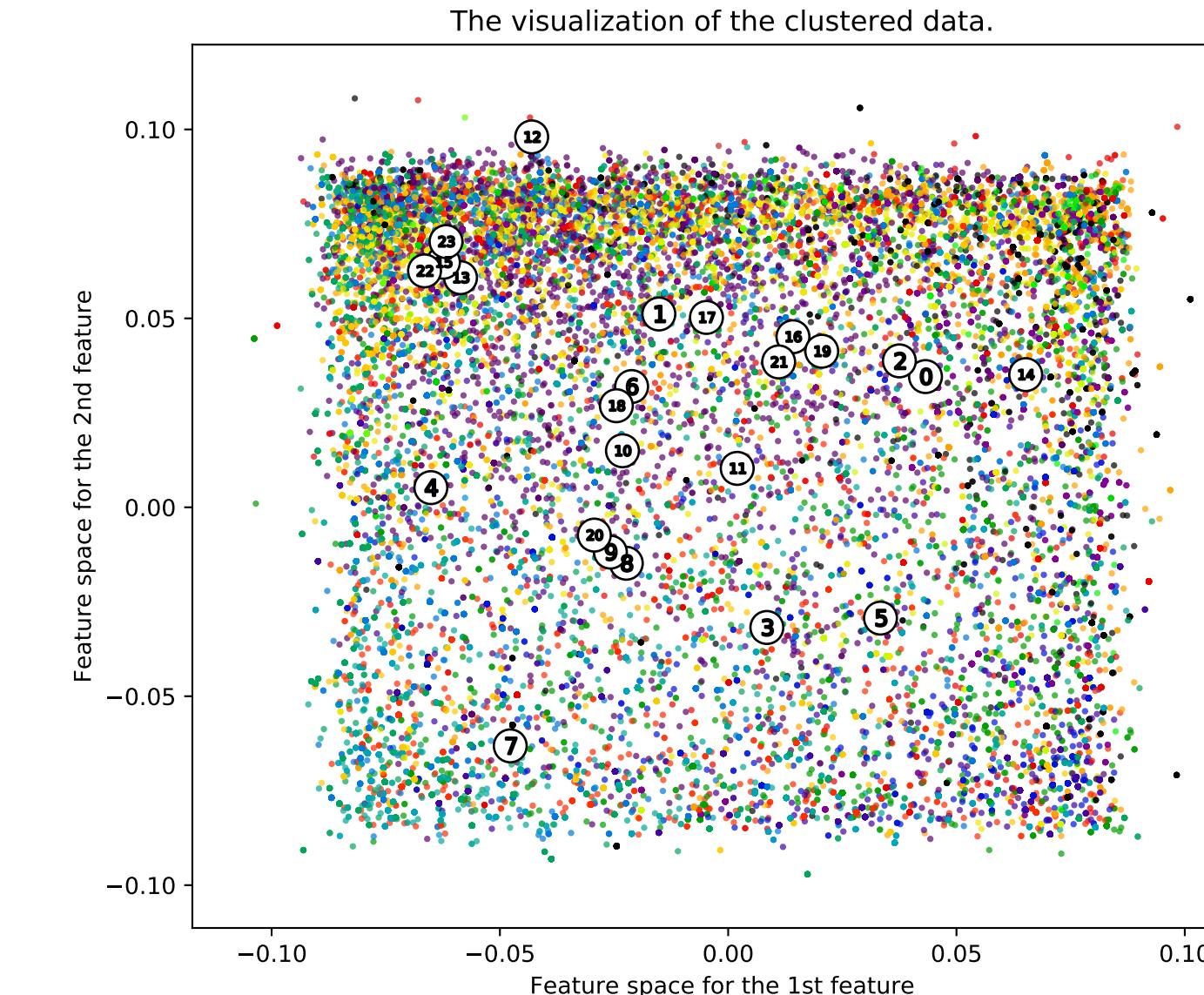
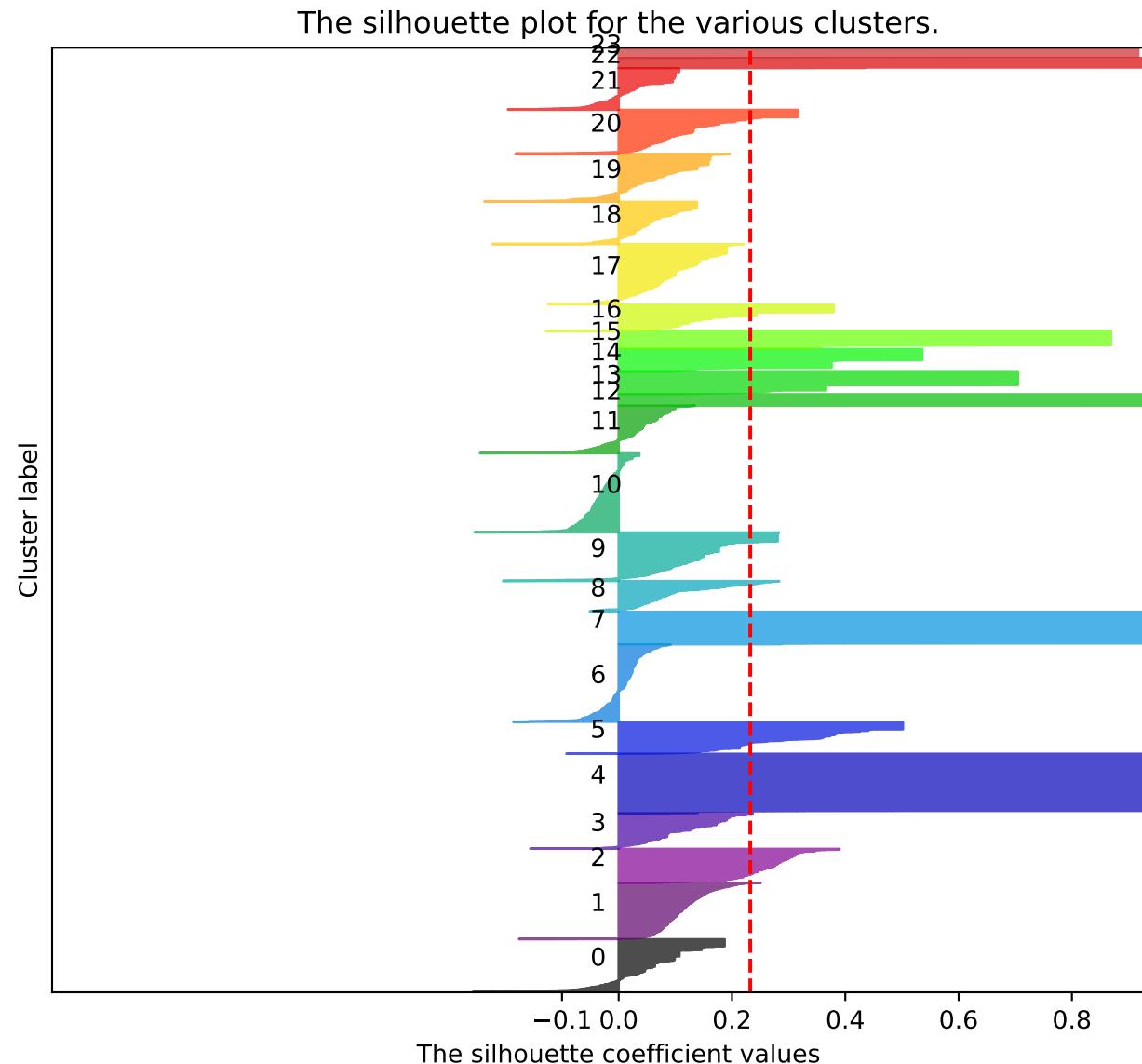
The silhouette plot for the various clusters.



The visualization of the clustered data.

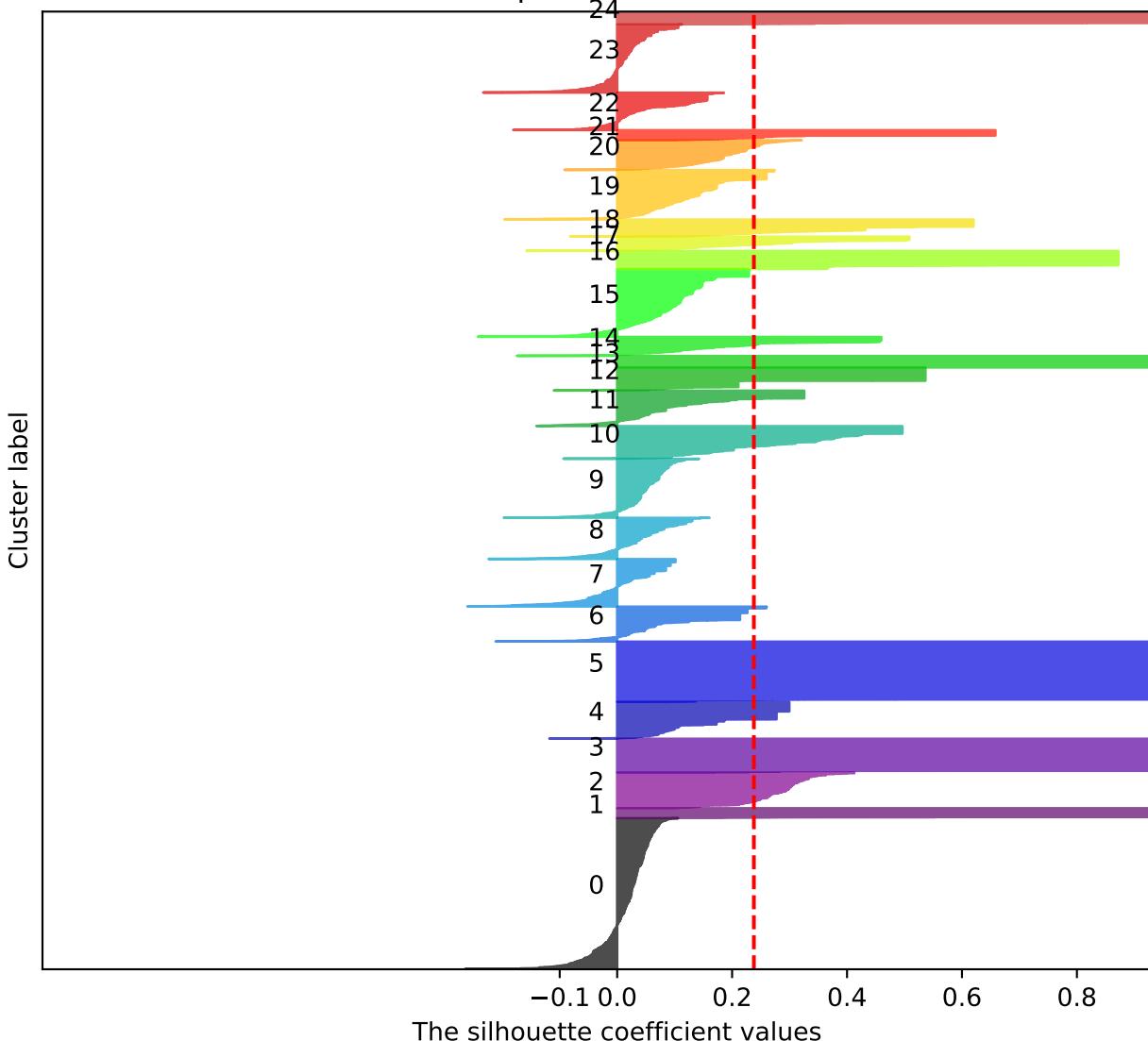


Silhouette analysis for KMeans clustering on sample data with n_clusters = 24 with Average Silhouette of: 0.23225614428520203

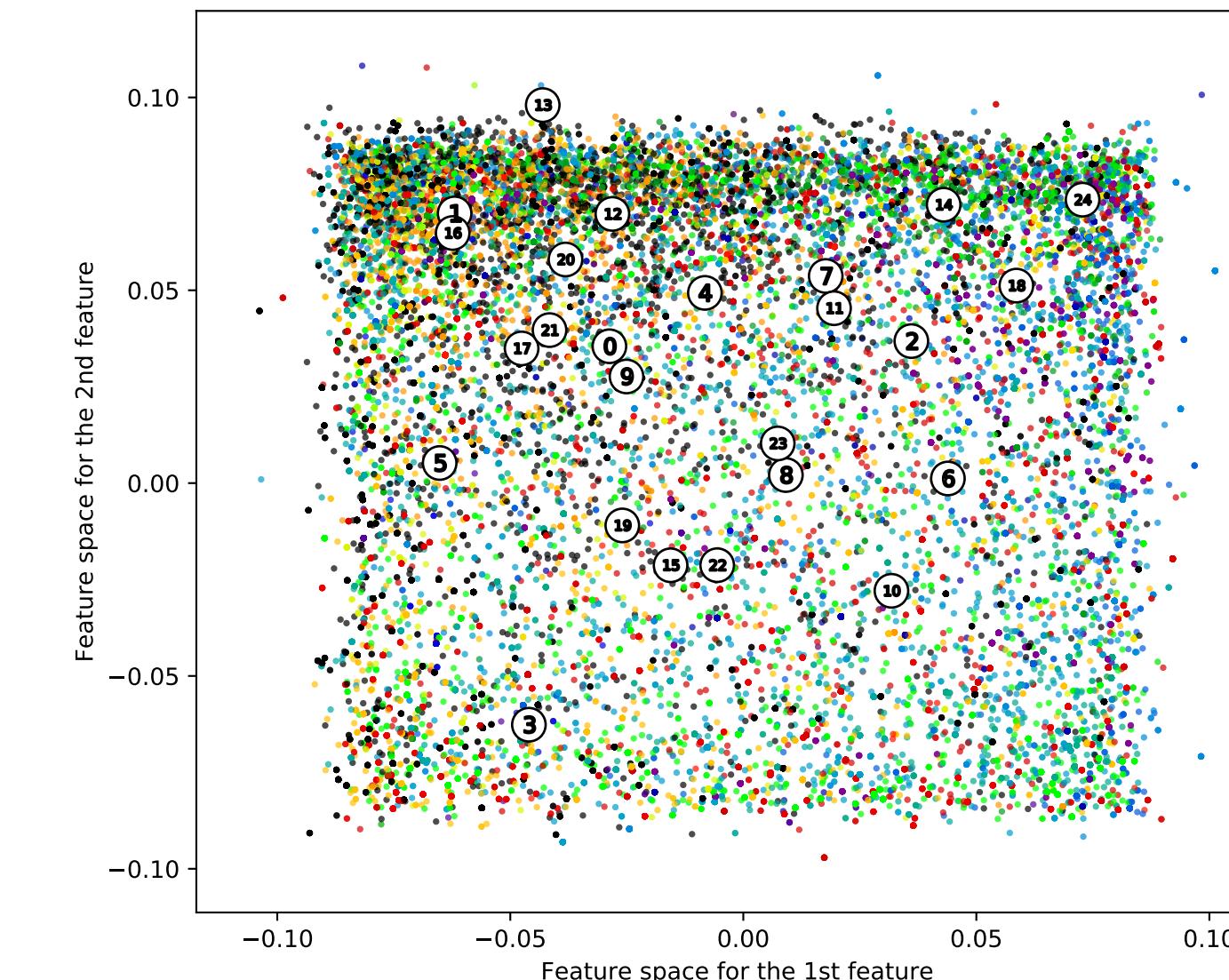


Silhouette analysis for KMeans clustering on sample data with n_clusters = 25 with Average Silhouette of: 0.2379102259874344

The silhouette plot for the various clusters.

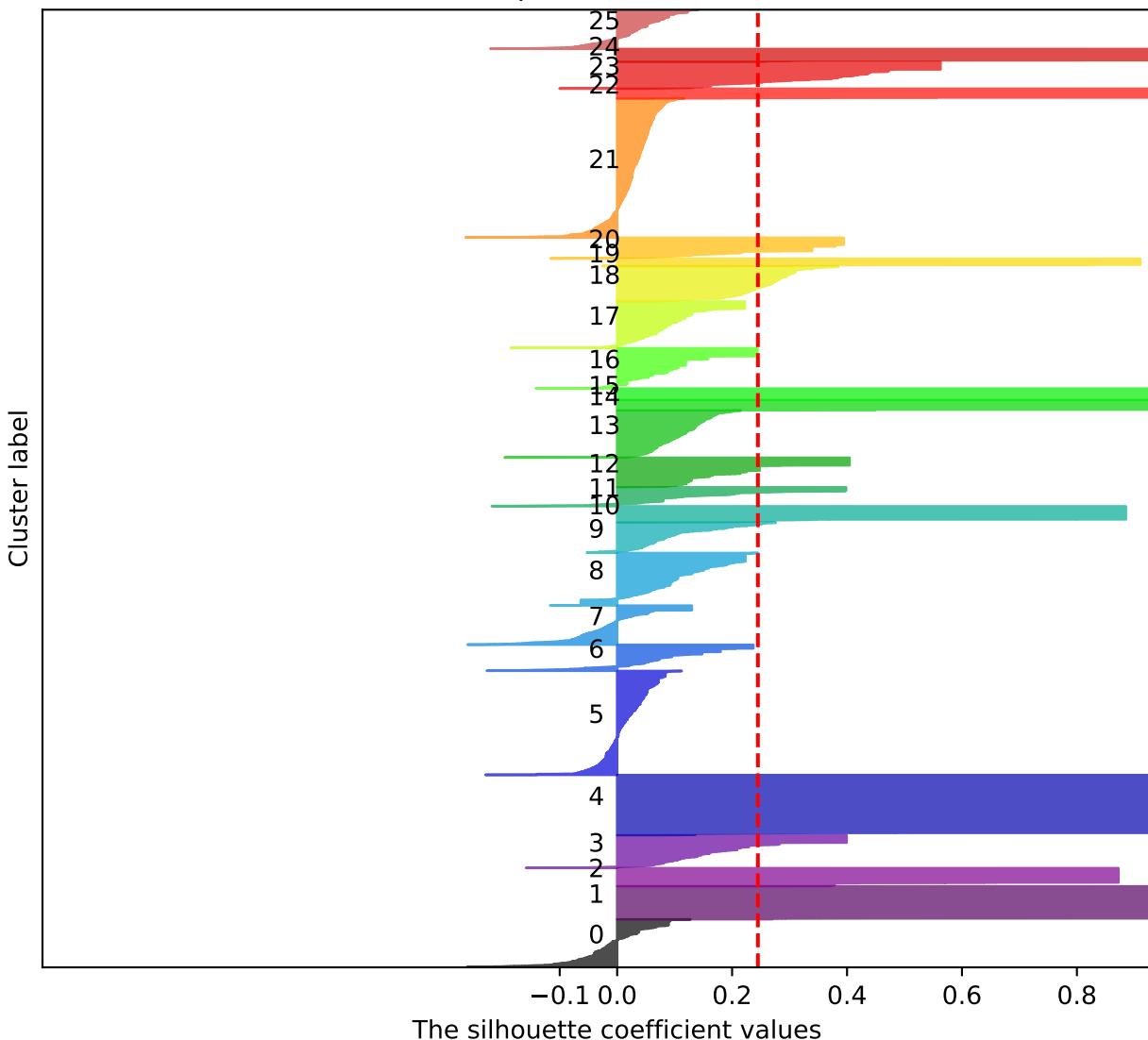


The visualization of the clustered data.

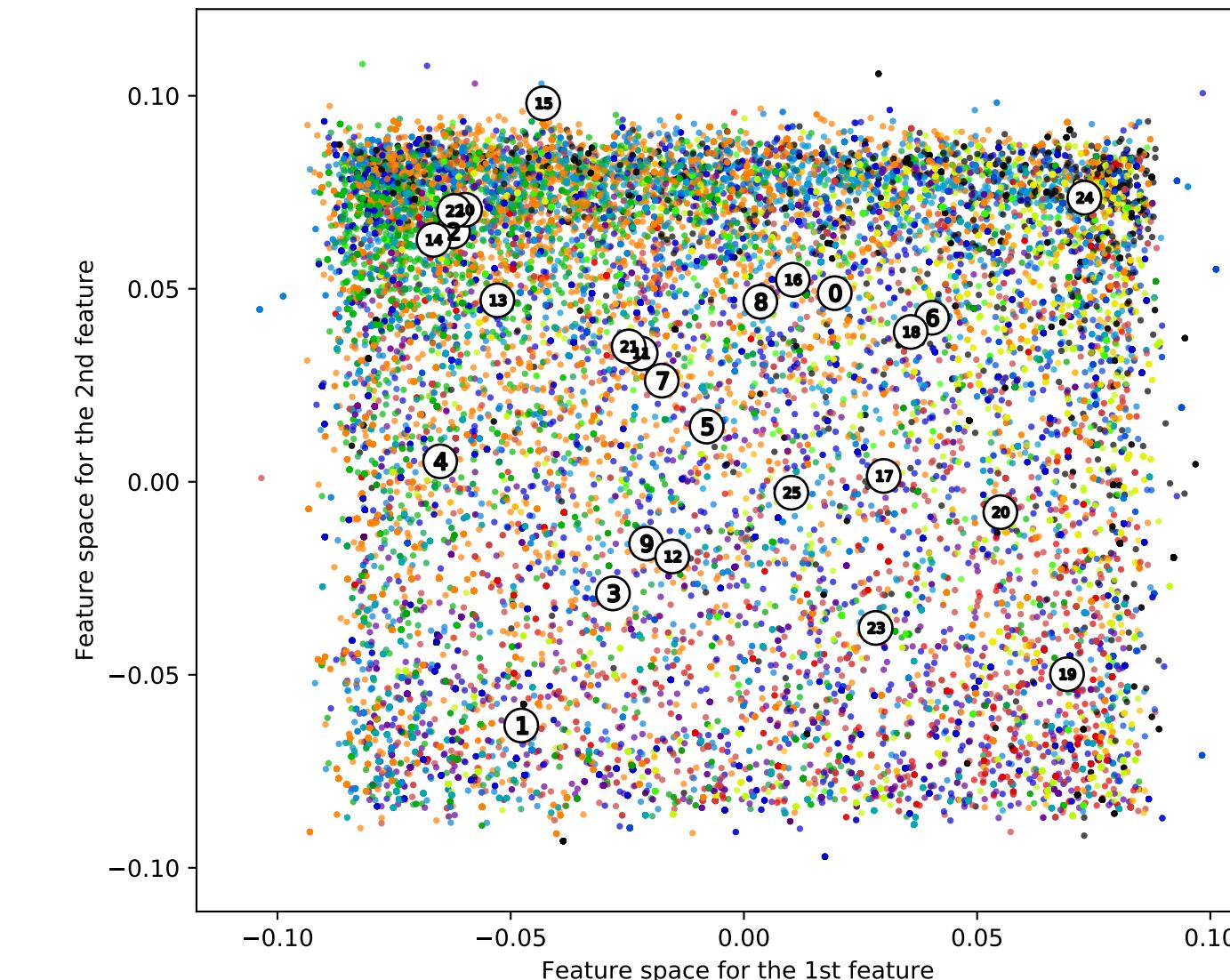


Silhouette analysis for KMeans clustering on sample data with n_clusters = 26 with Average Silhouette of: 0.2449178546667099

The silhouette plot for the various clusters.

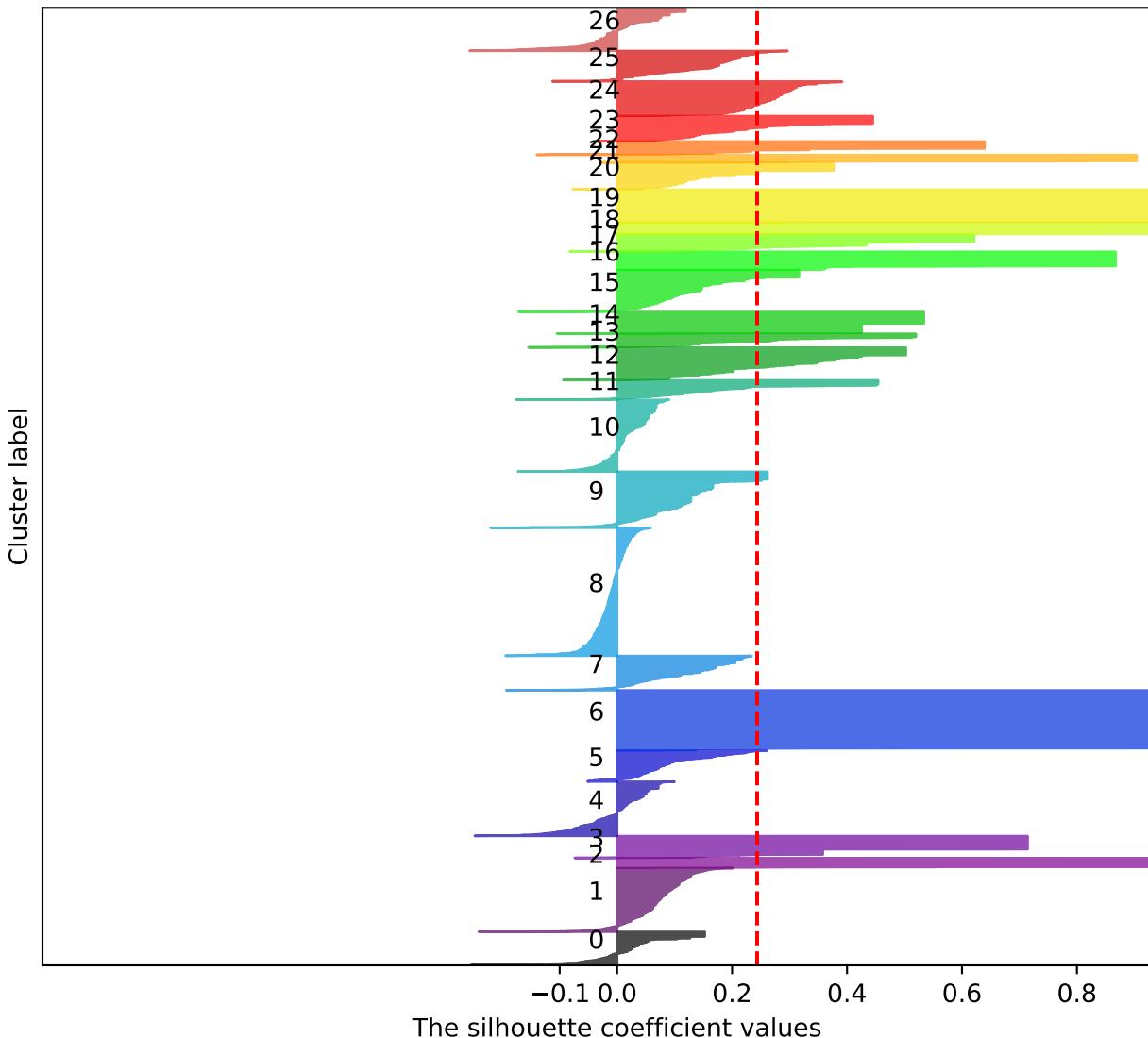


The visualization of the clustered data.

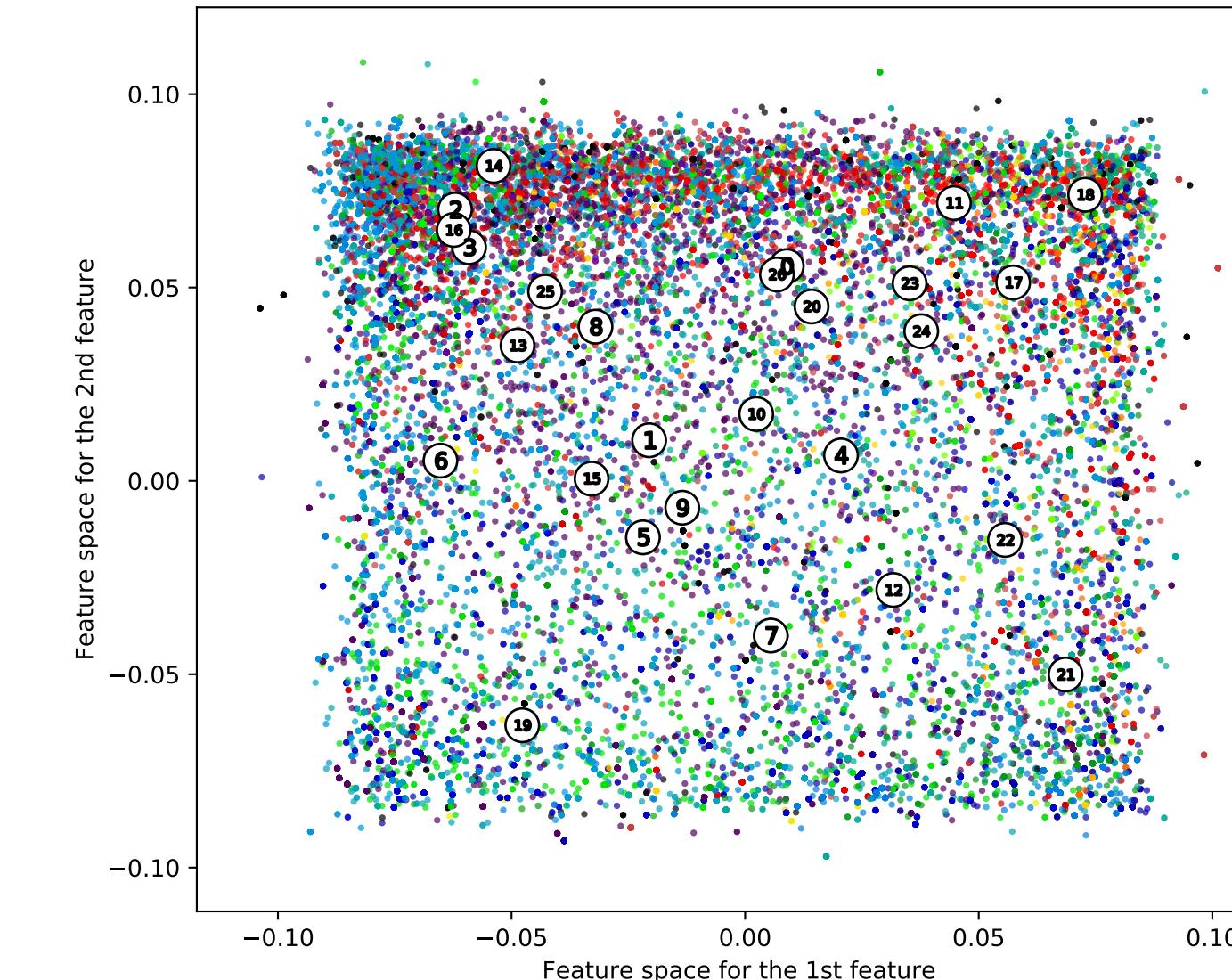


Silhouette analysis for KMeans clustering on sample data with n_clusters = 27 with Average Silhouette of: 0.2435639500617981

The silhouette plot for the various clusters.

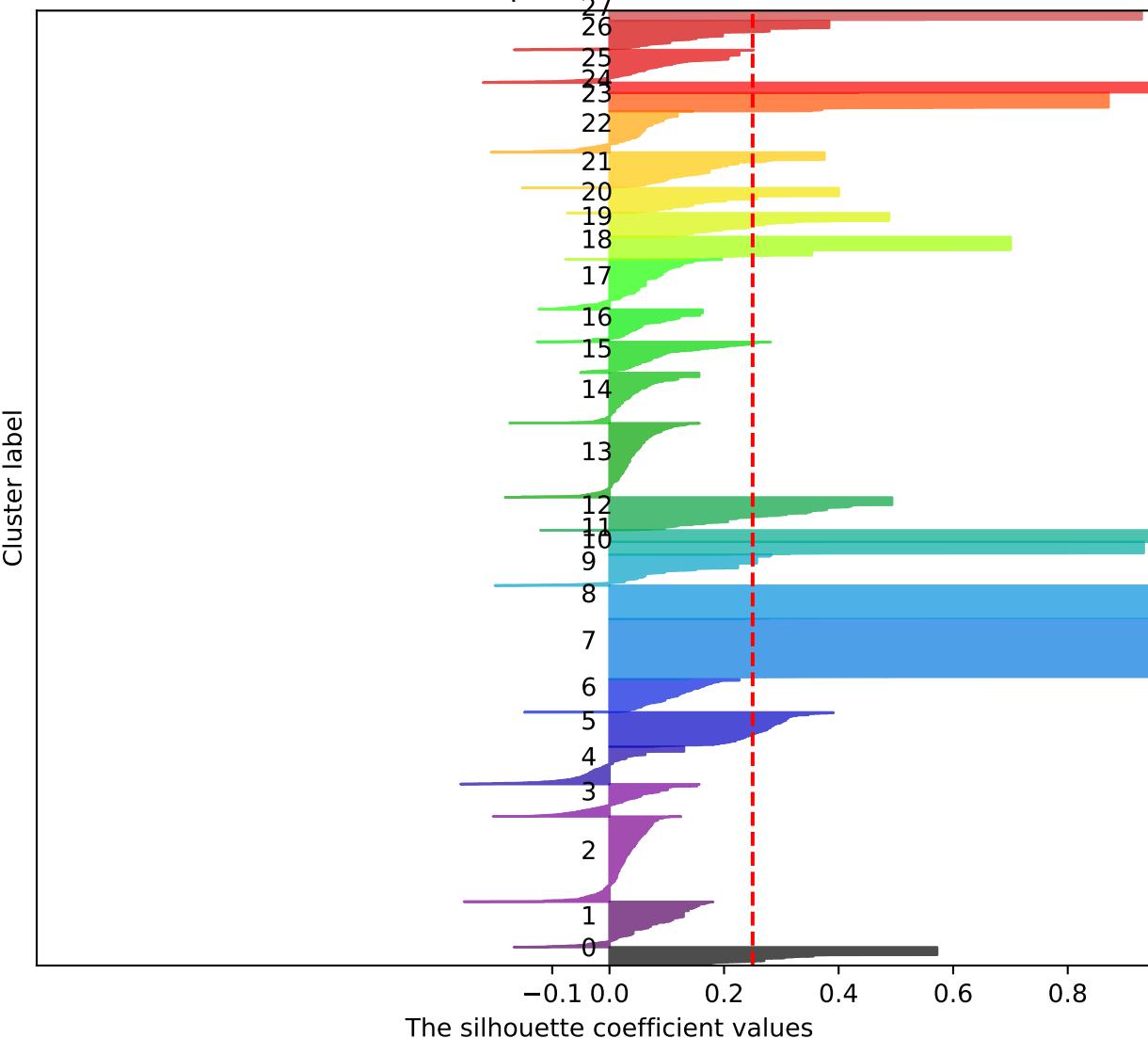


The visualization of the clustered data.

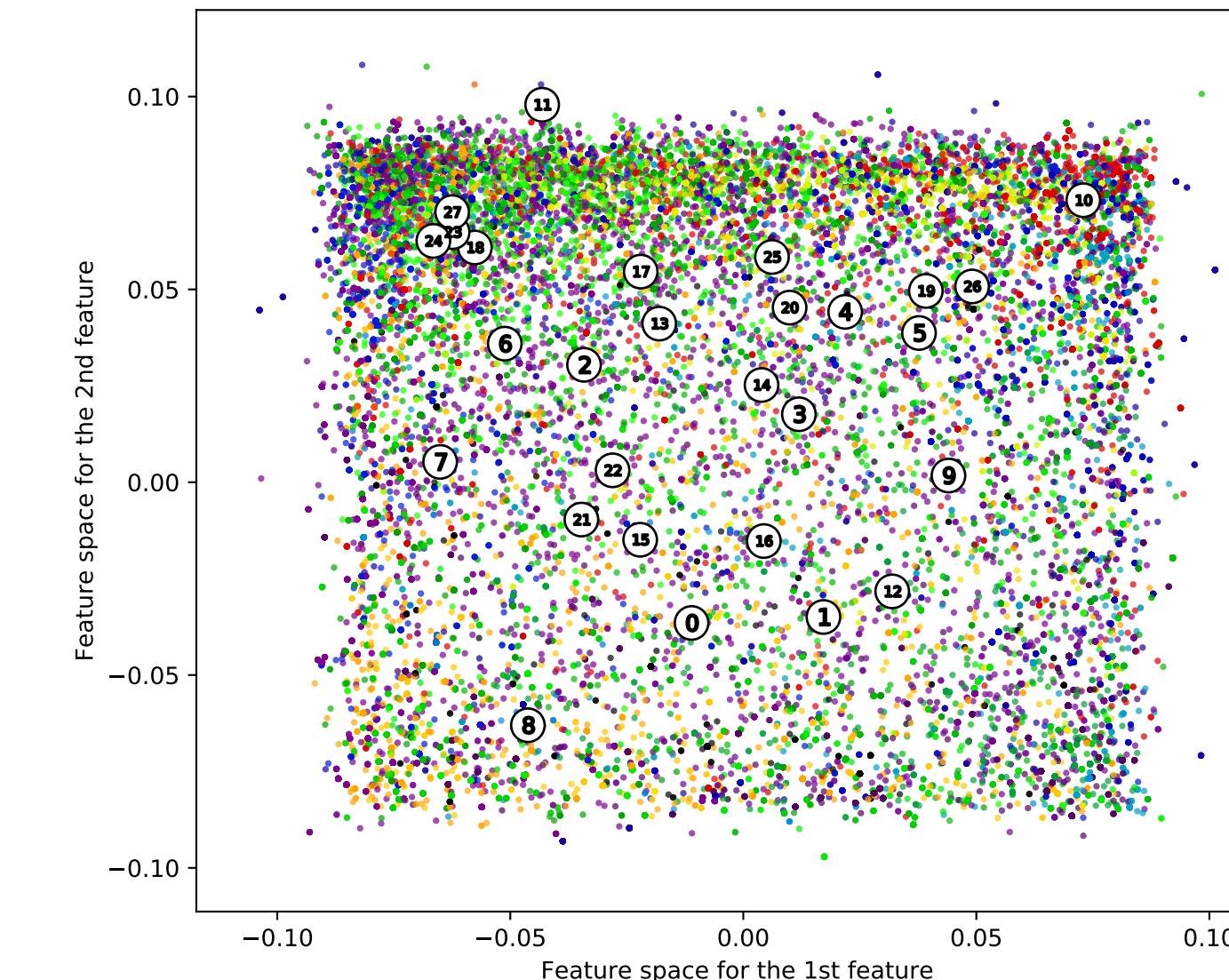


Silhouette analysis for KMeans clustering on sample data with n_clusters = 28 with Average Silhouette of: 0.24989816546440125

The silhouette plot for the various clusters.

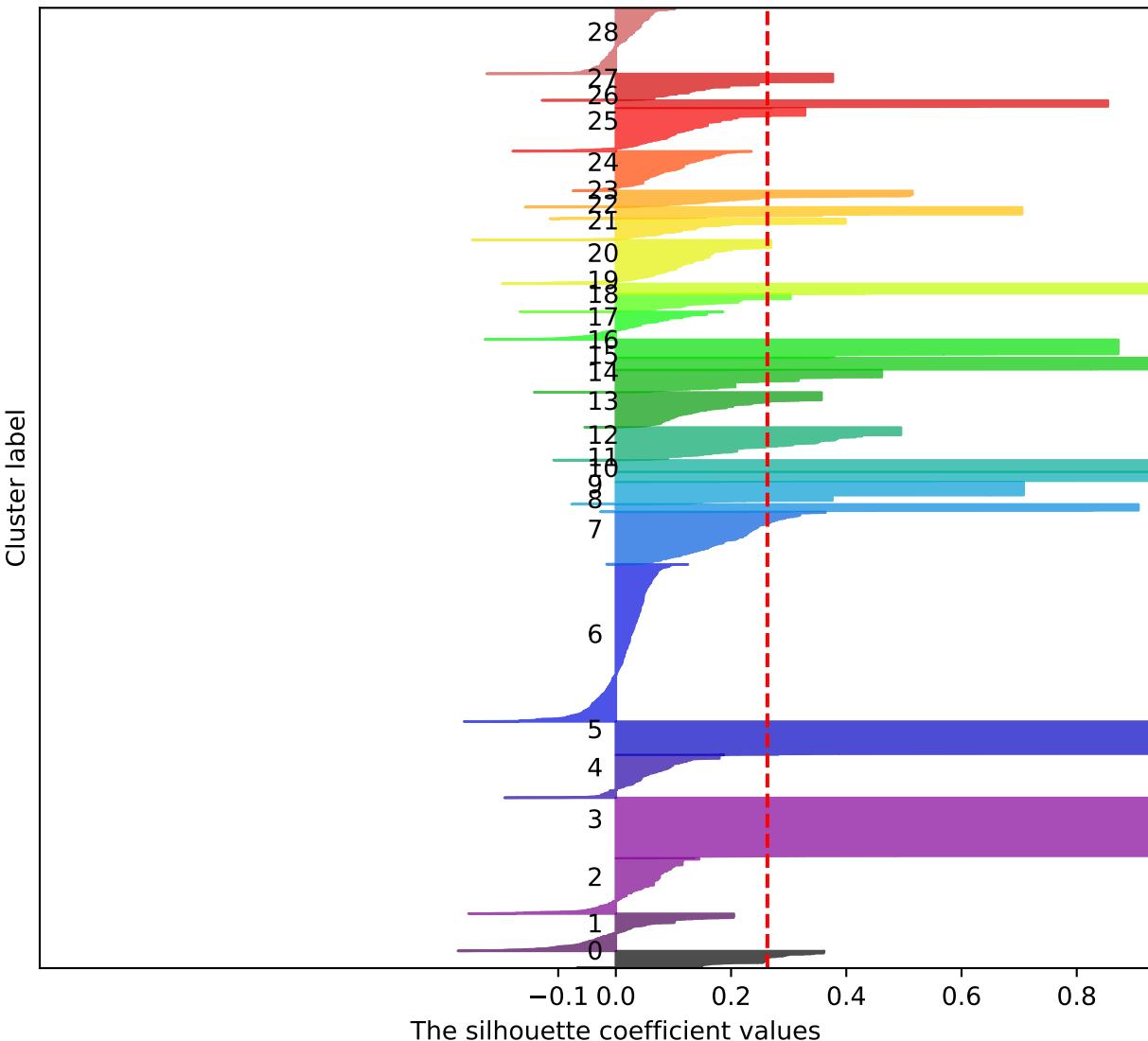


The visualization of the clustered data.

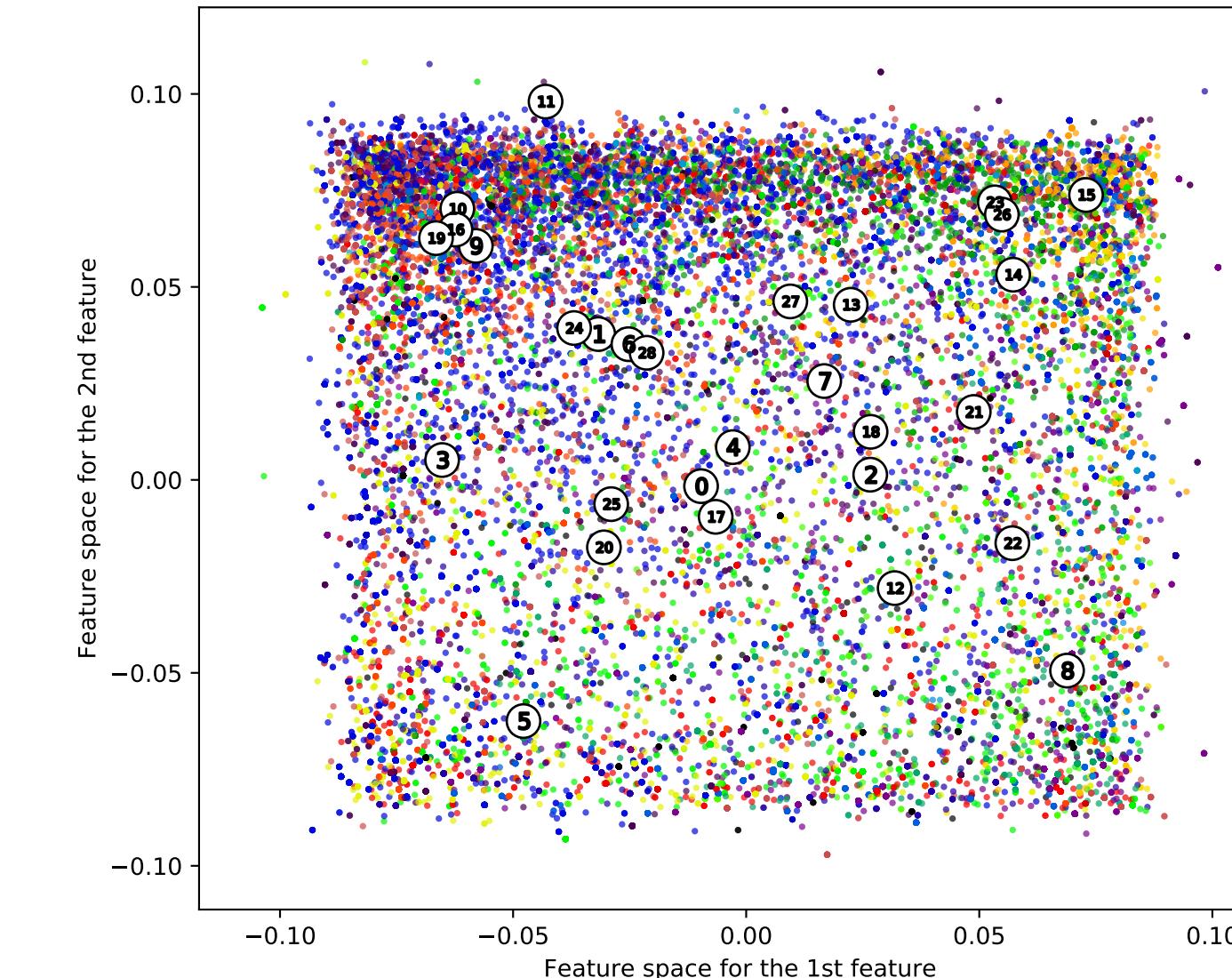


Silhouette analysis for KMeans clustering on sample data with n_clusters = 29 with Average Silhouette of: 0.2630937099456787

The silhouette plot for the various clusters.

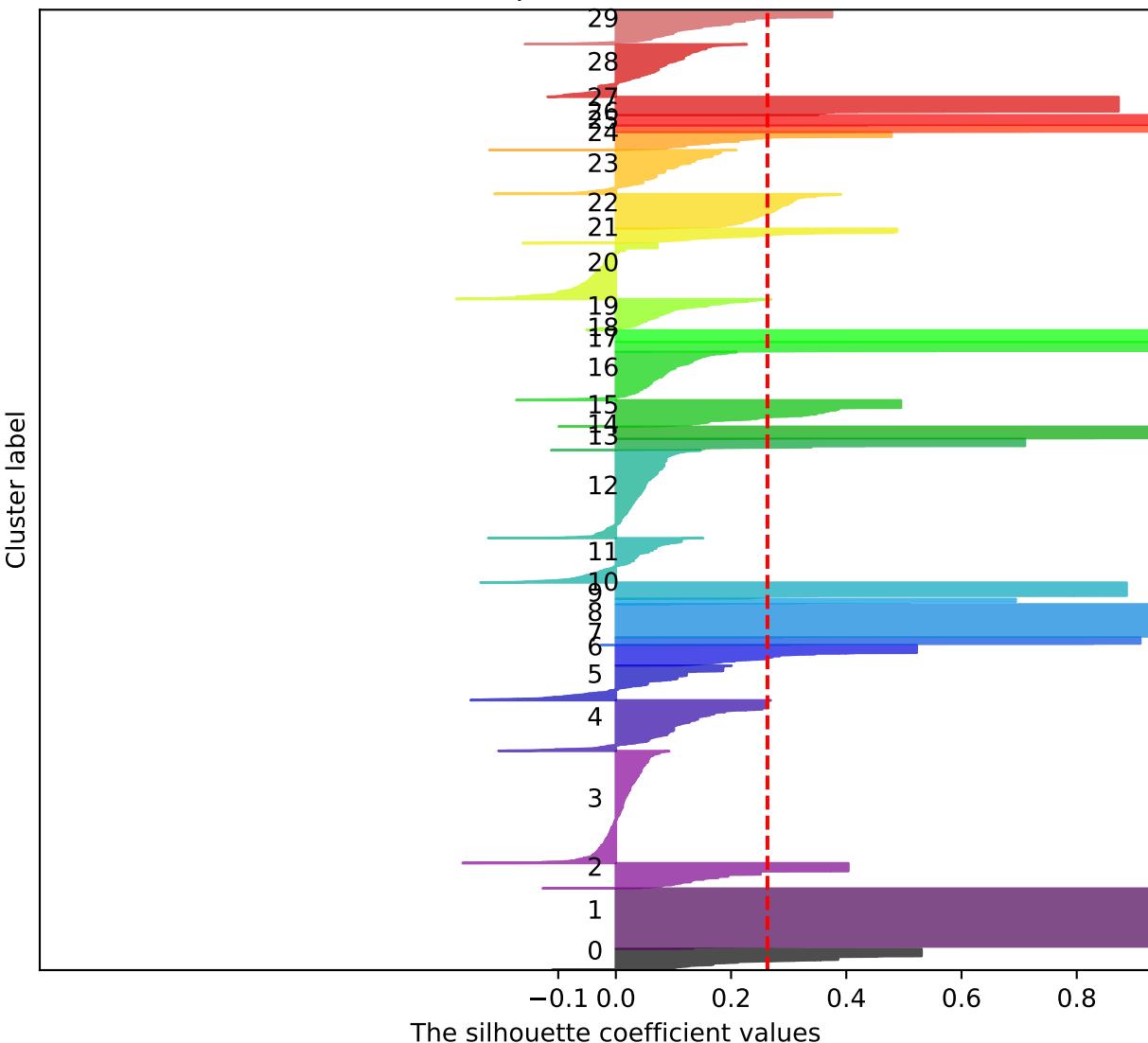


The visualization of the clustered data.

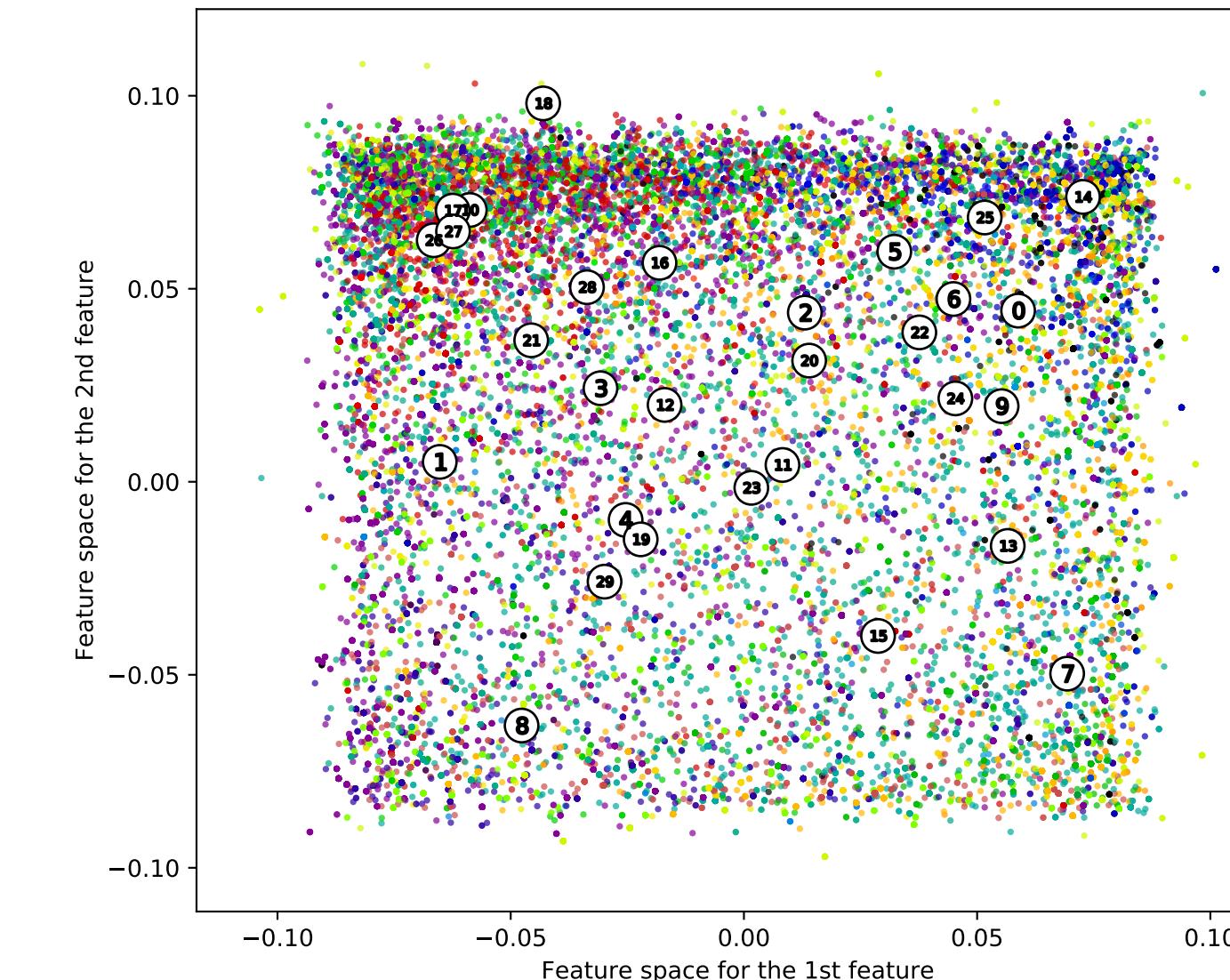


Silhouette analysis for KMeans clustering on sample data with n_clusters = 30 with Average Silhouette of: 0.26317113637924194

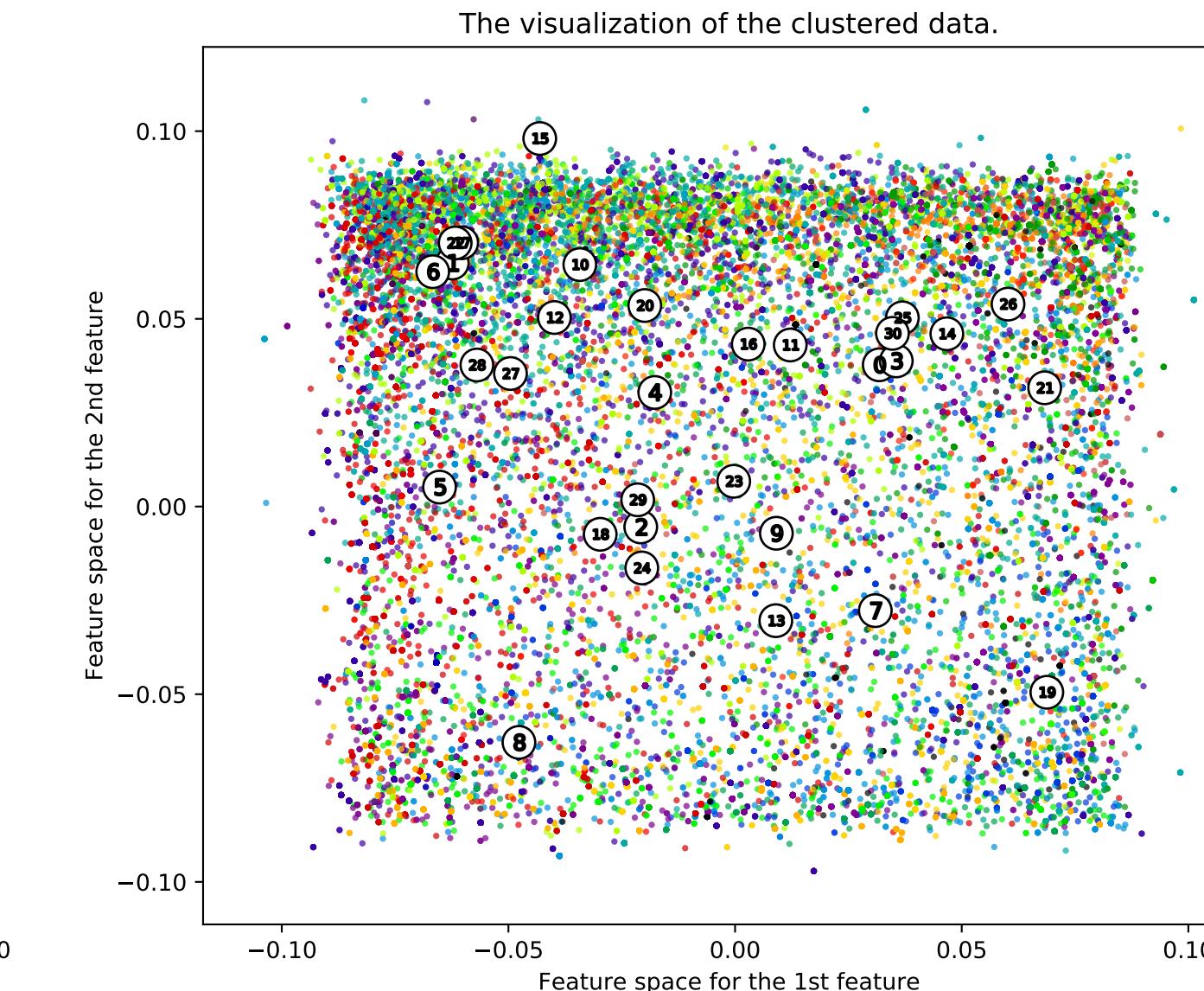
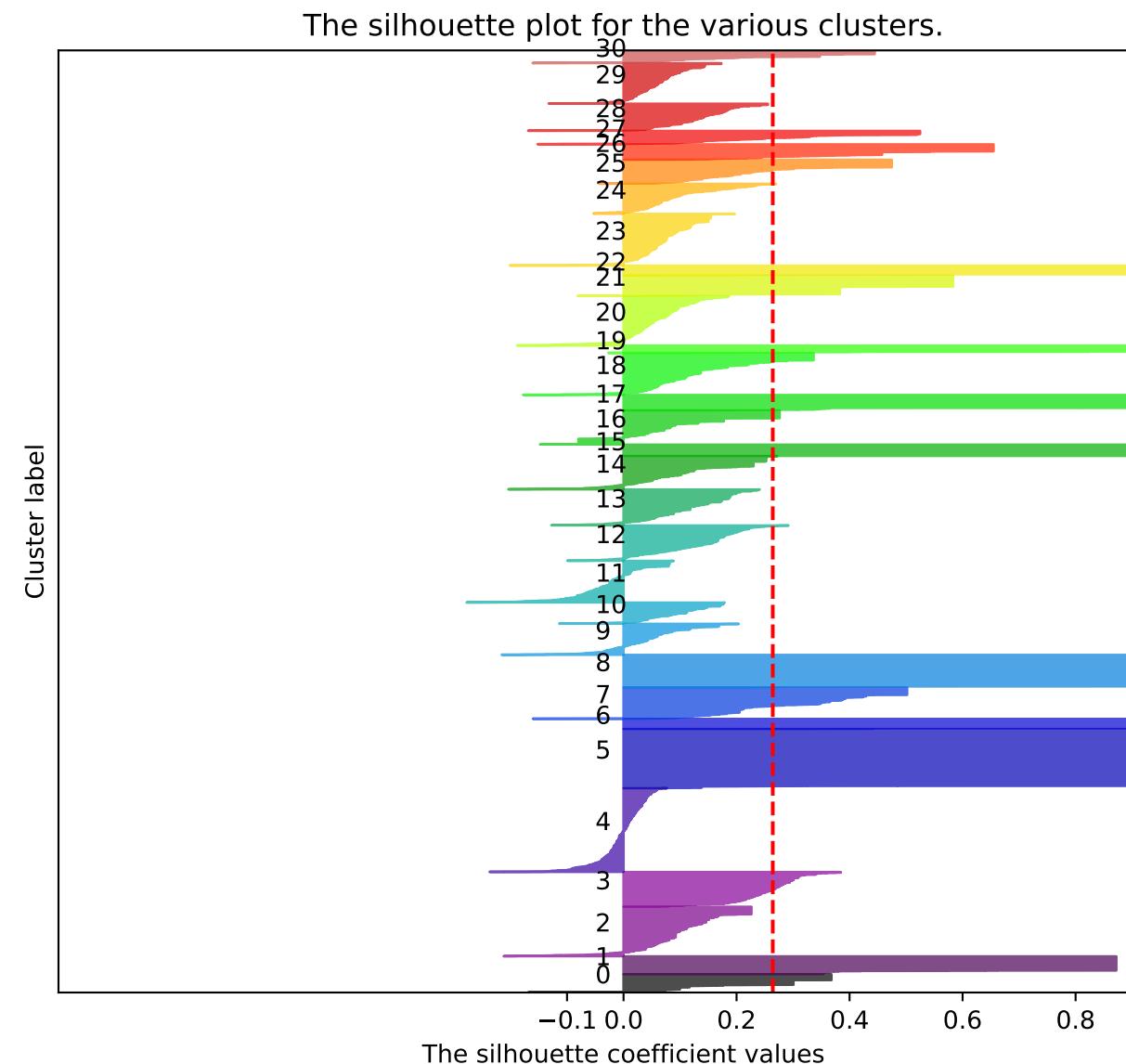
The silhouette plot for the various clusters.



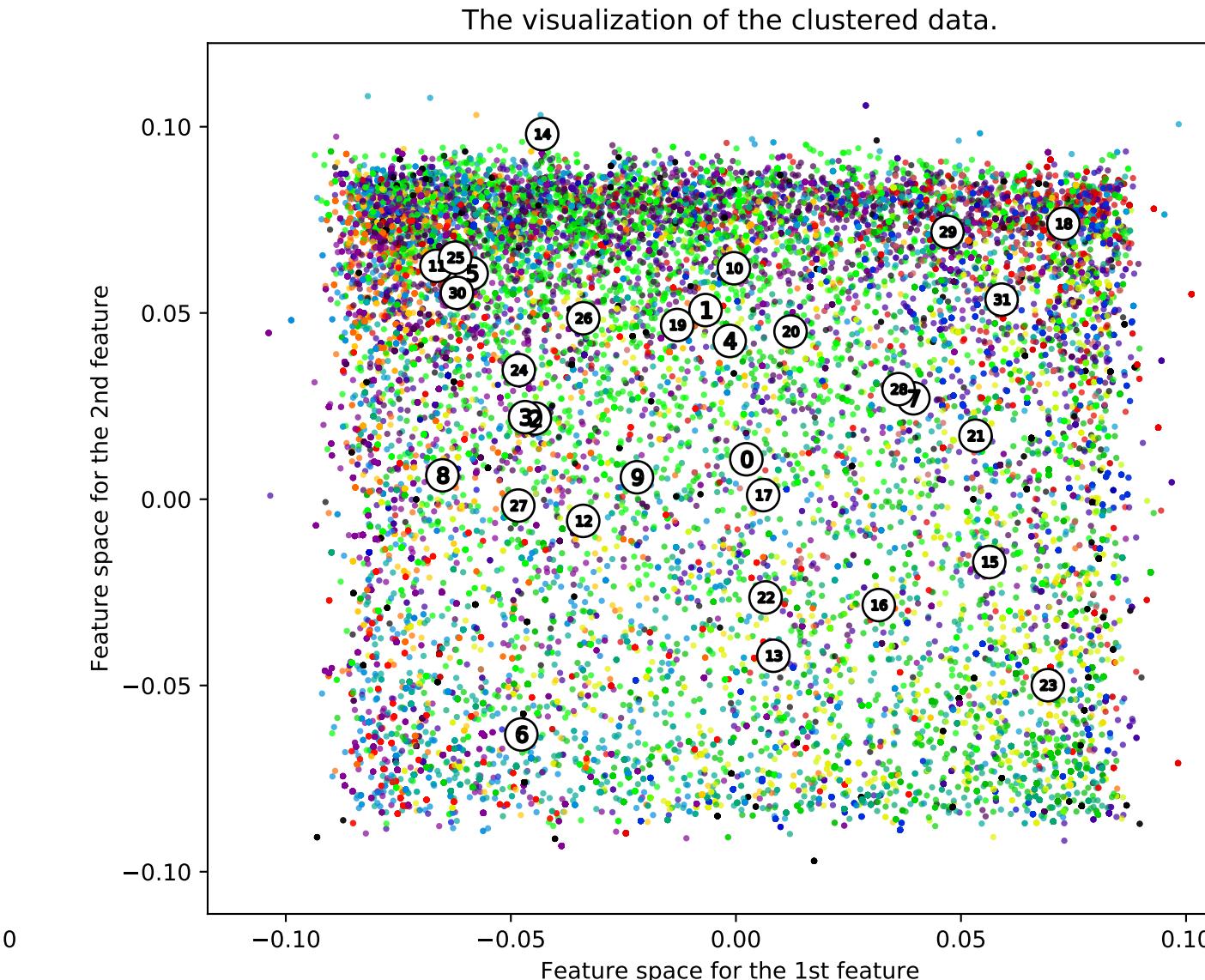
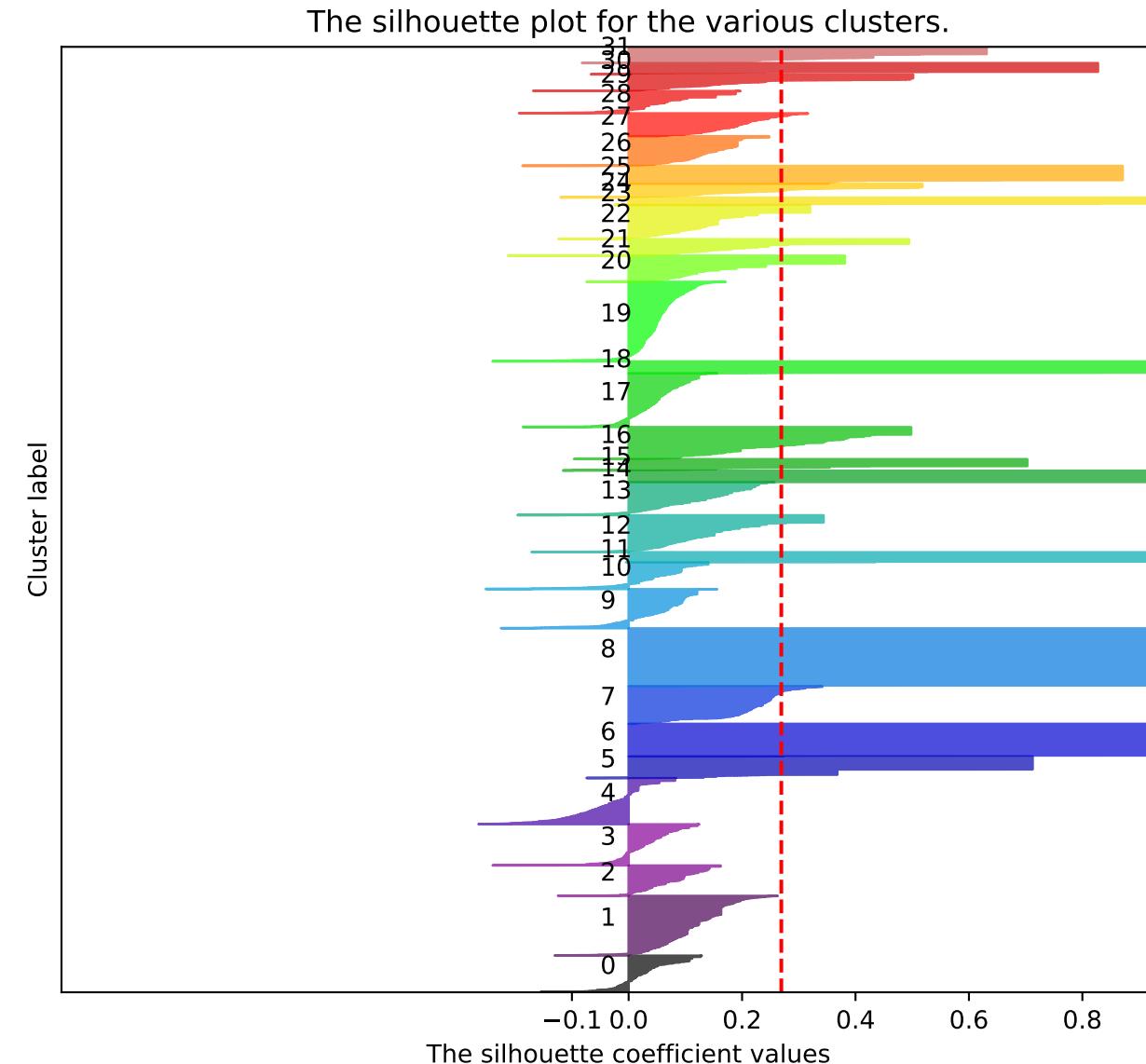
The visualization of the clustered data.



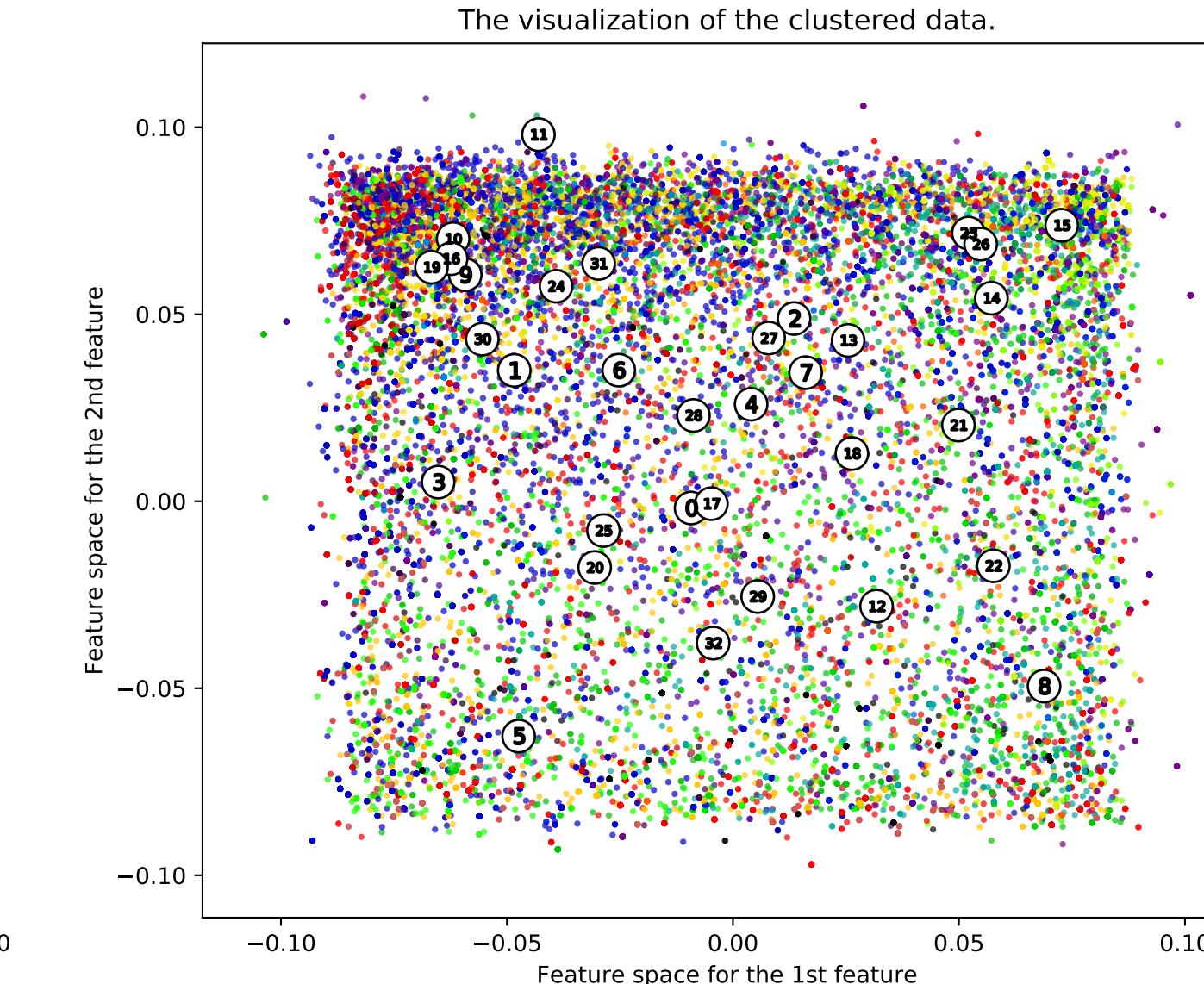
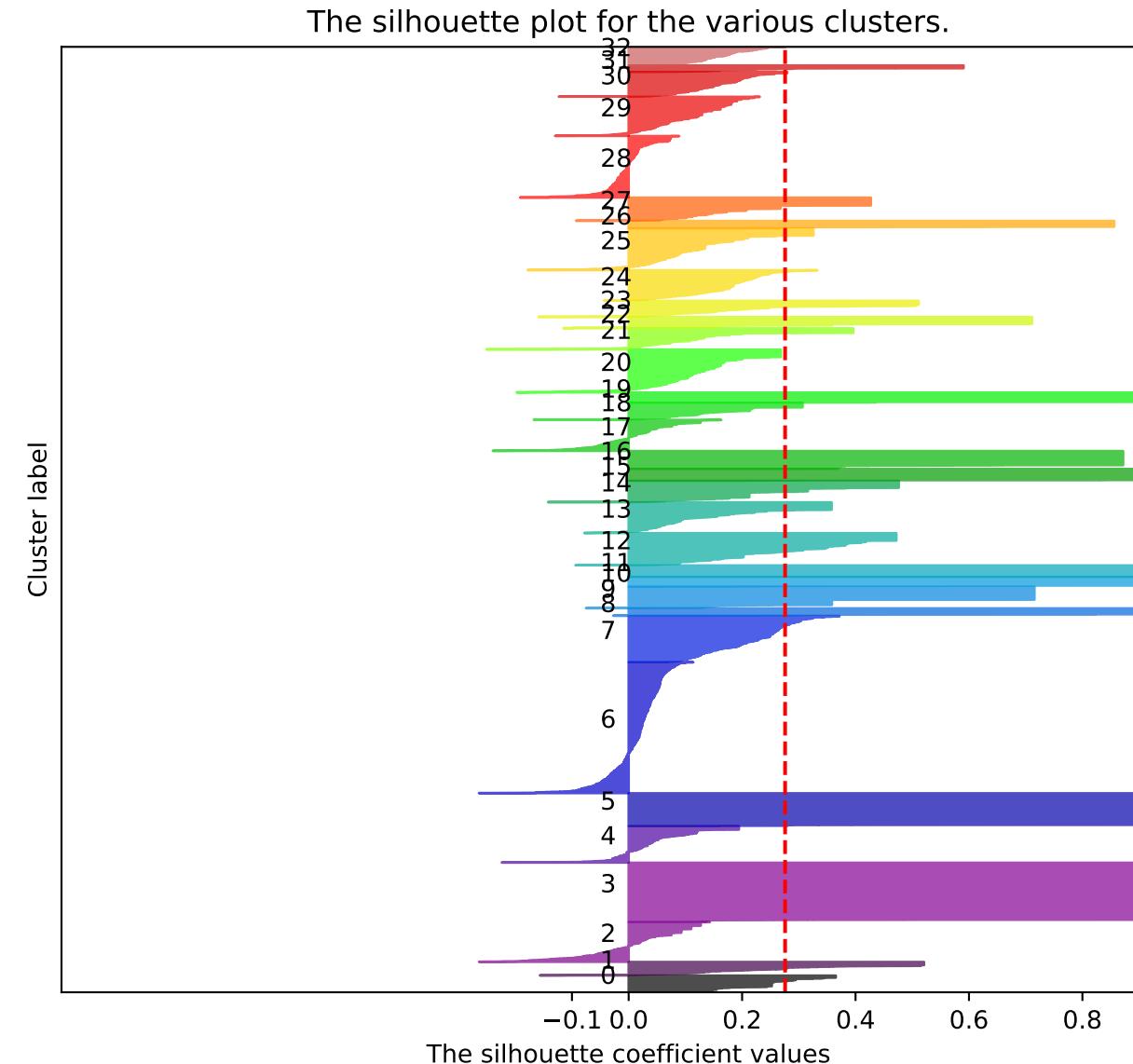
Silhouette analysis for KMeans clustering on sample data with n_clusters = 31 with Average Silhouette of: 0.264093279838562



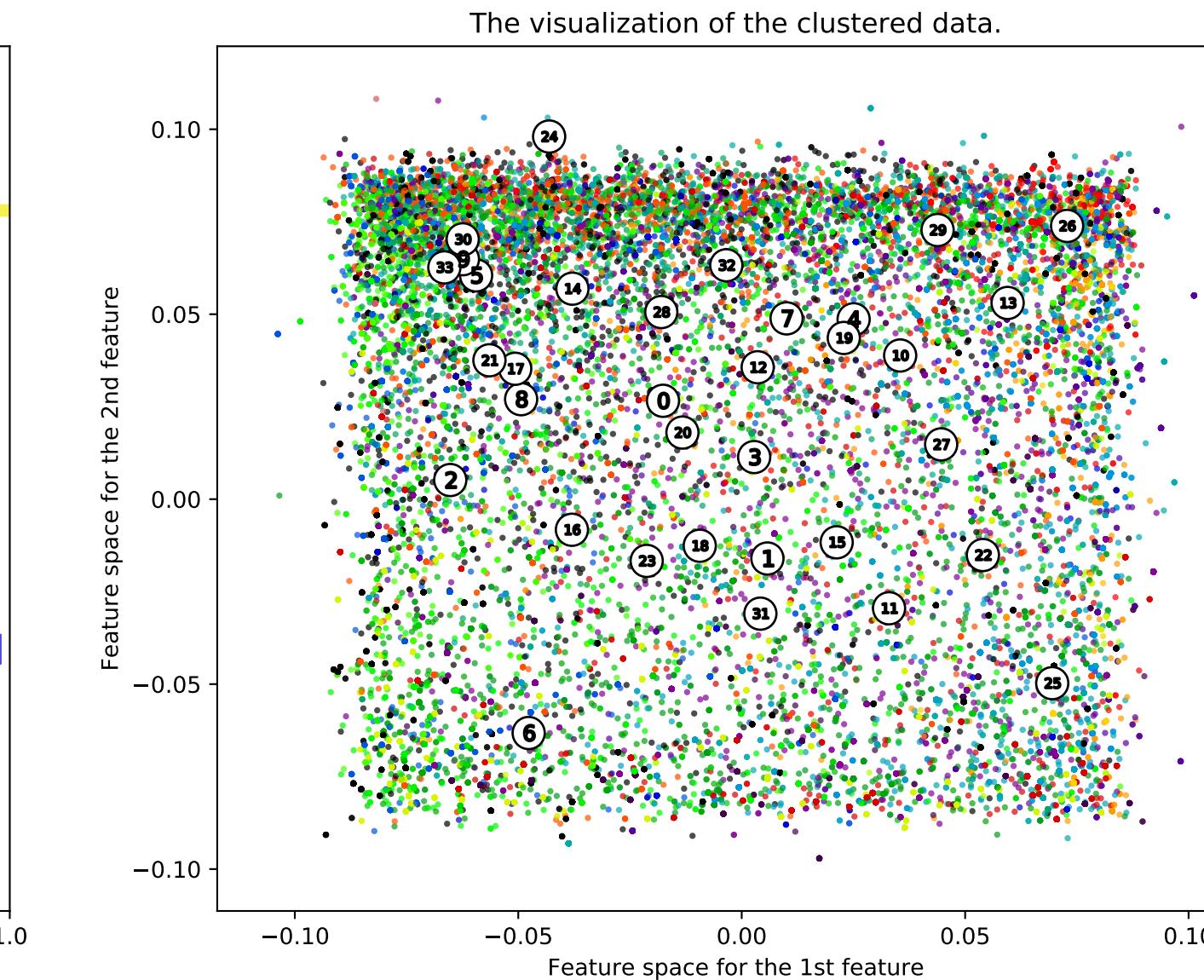
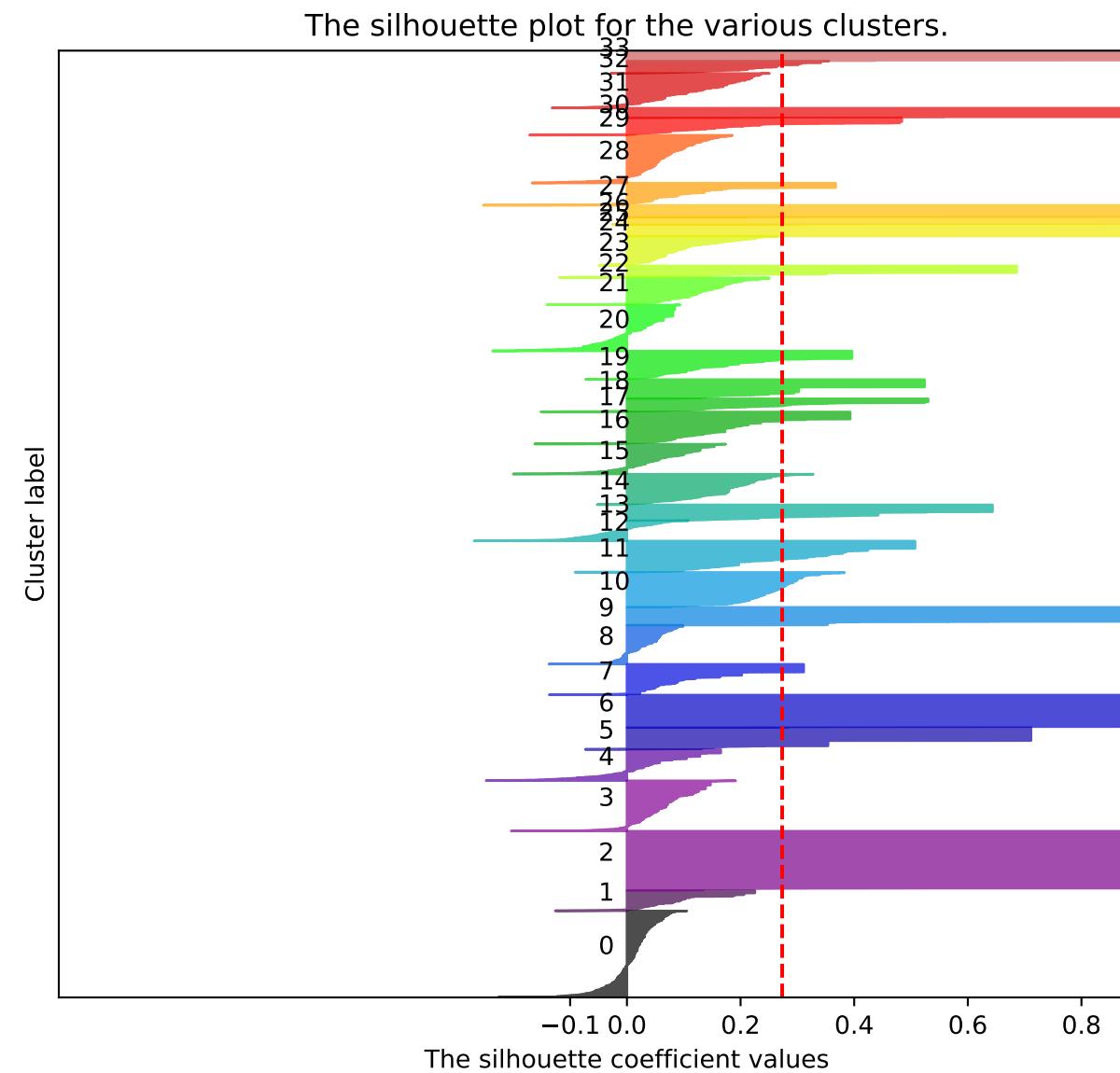
Silhouette analysis for KMeans clustering on sample data with n_clusters = 32 with Average Silhouette of: 0.26920995116233826



Silhouette analysis for KMeans clustering on sample data with n_clusters = 33 with Average Silhouette of: 0.27583184838294983

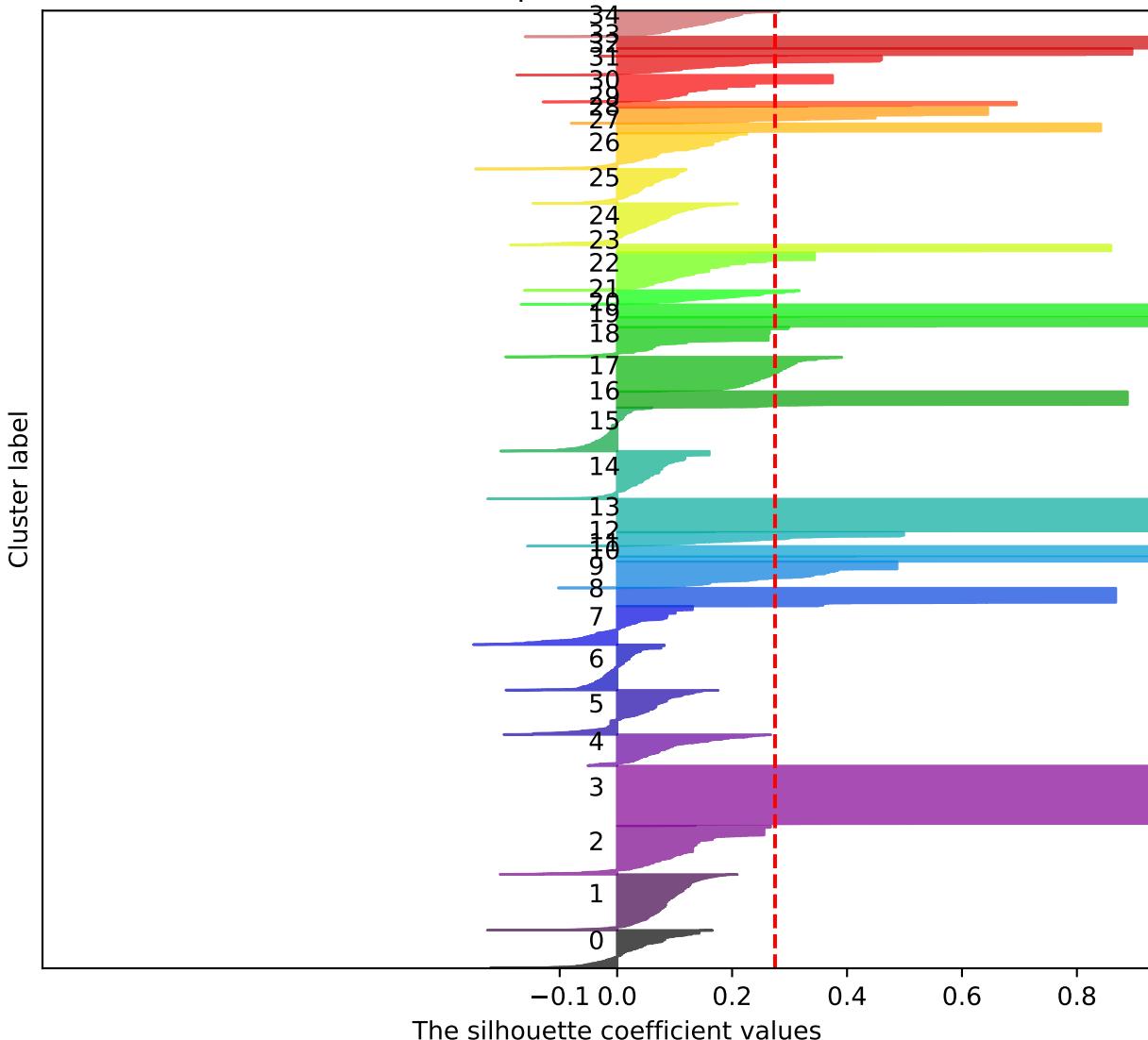


Silhouette analysis for KMeans clustering on sample data with n_clusters = 34 with Average Silhouette of: 0.273209810256958

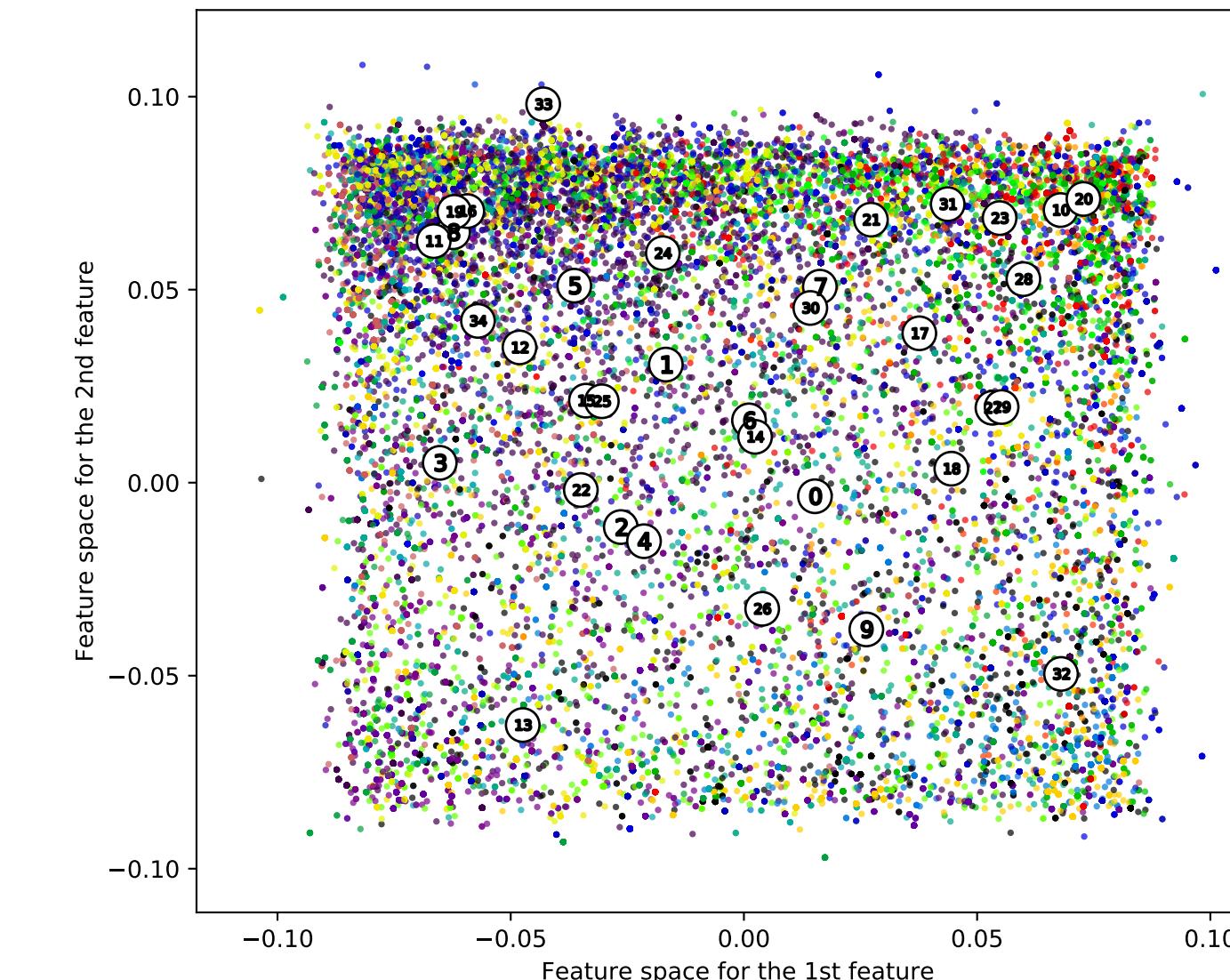


Silhouette analysis for KMeans clustering on sample data with n_clusters = 35 with Average Silhouette of: 0.2747260332107544

The silhouette plot for the various clusters.

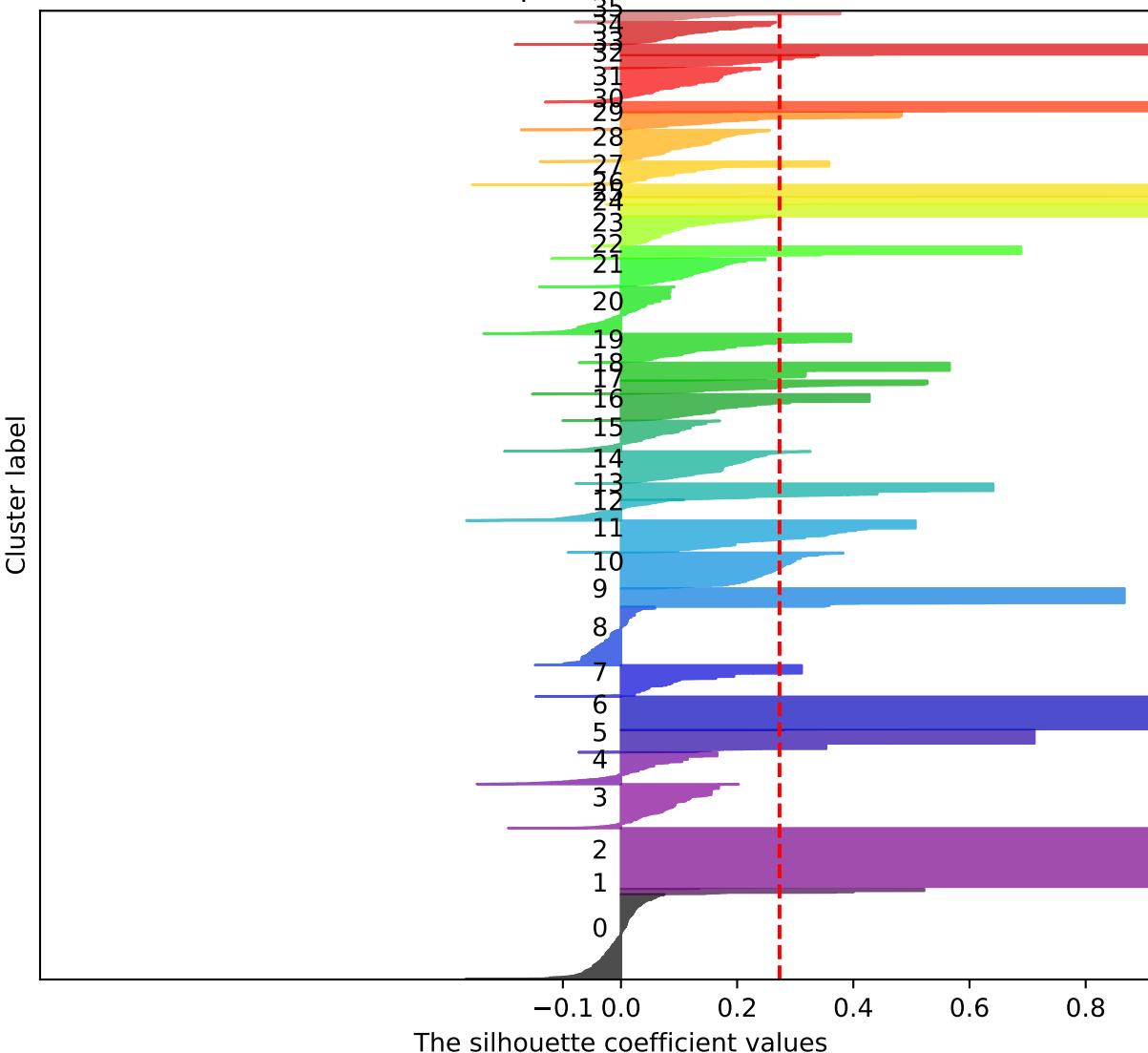


The visualization of the clustered data.

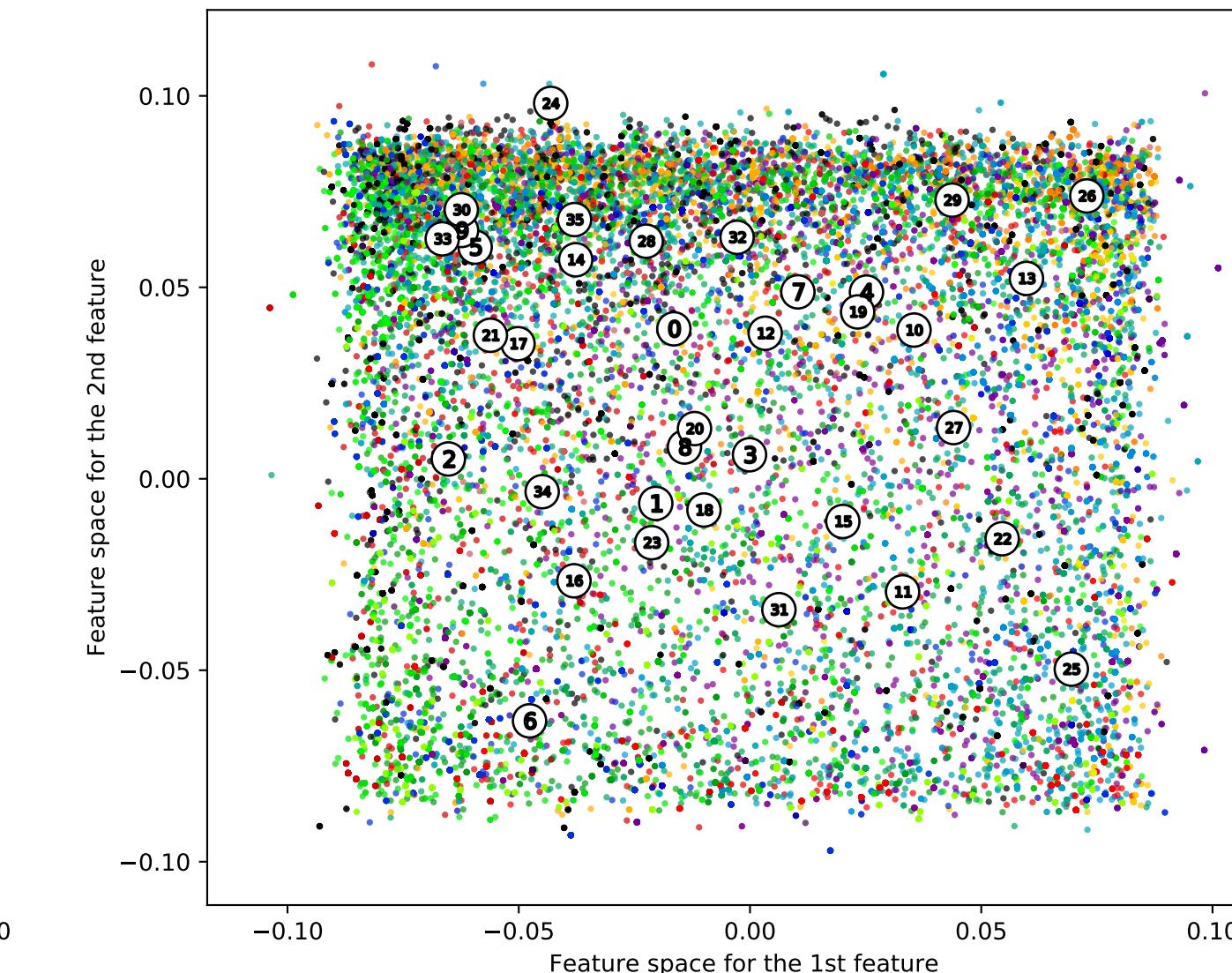


Silhouette analysis for KMeans clustering on sample data with n_clusters = 36 with Average Silhouette of: 0.2729794383049011

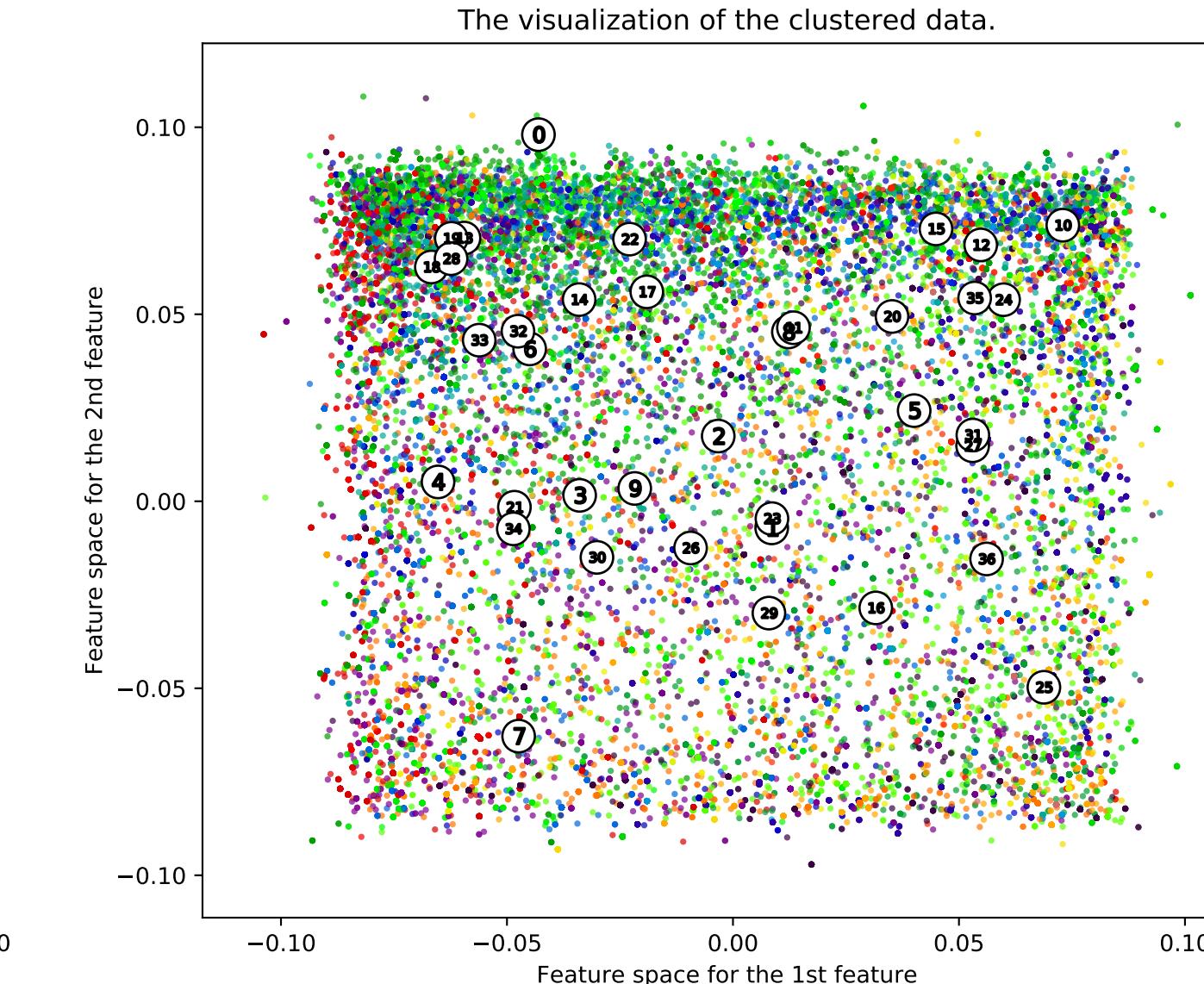
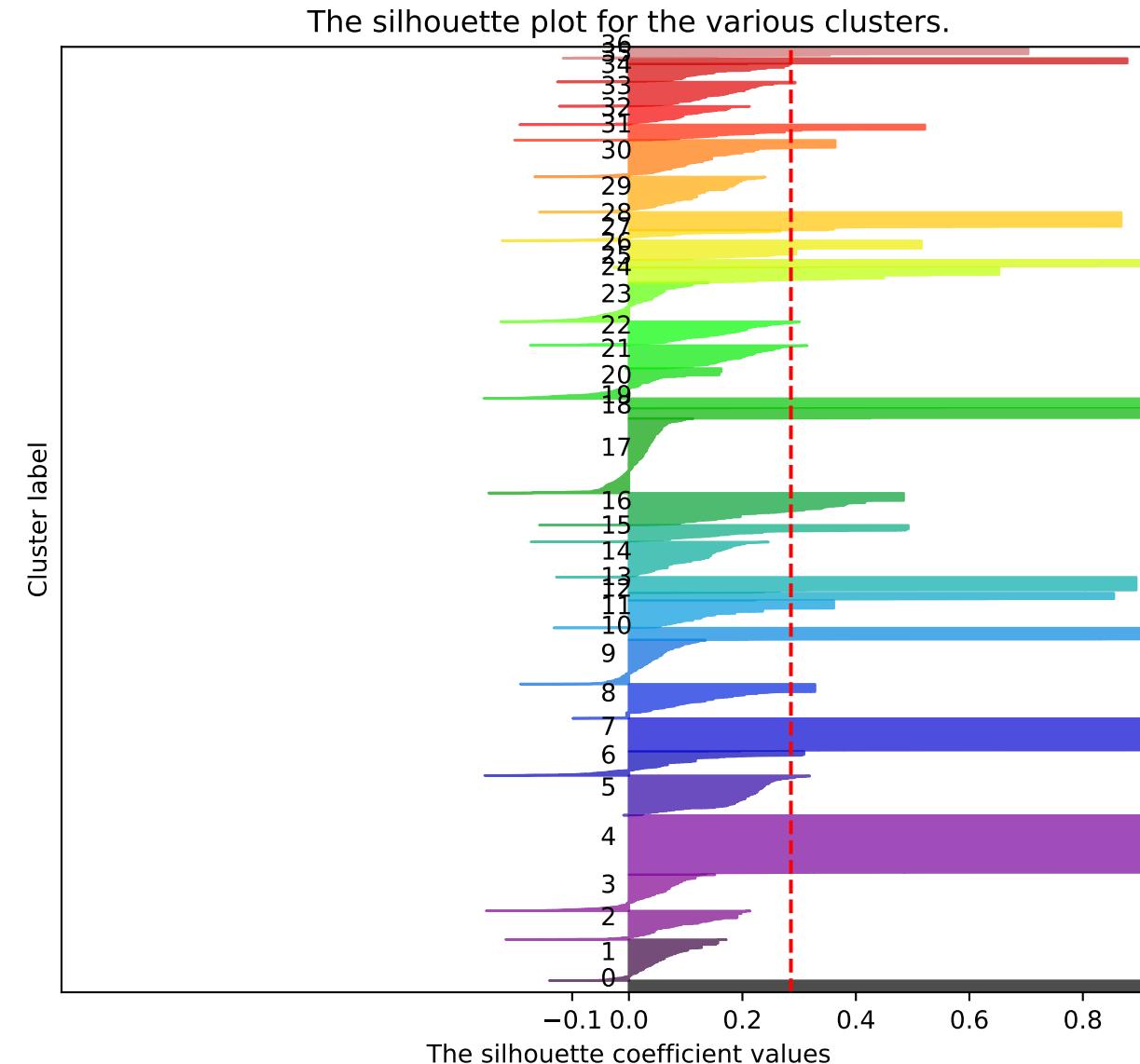
The silhouette plot for the various clusters.



The visualization of the clustered data.

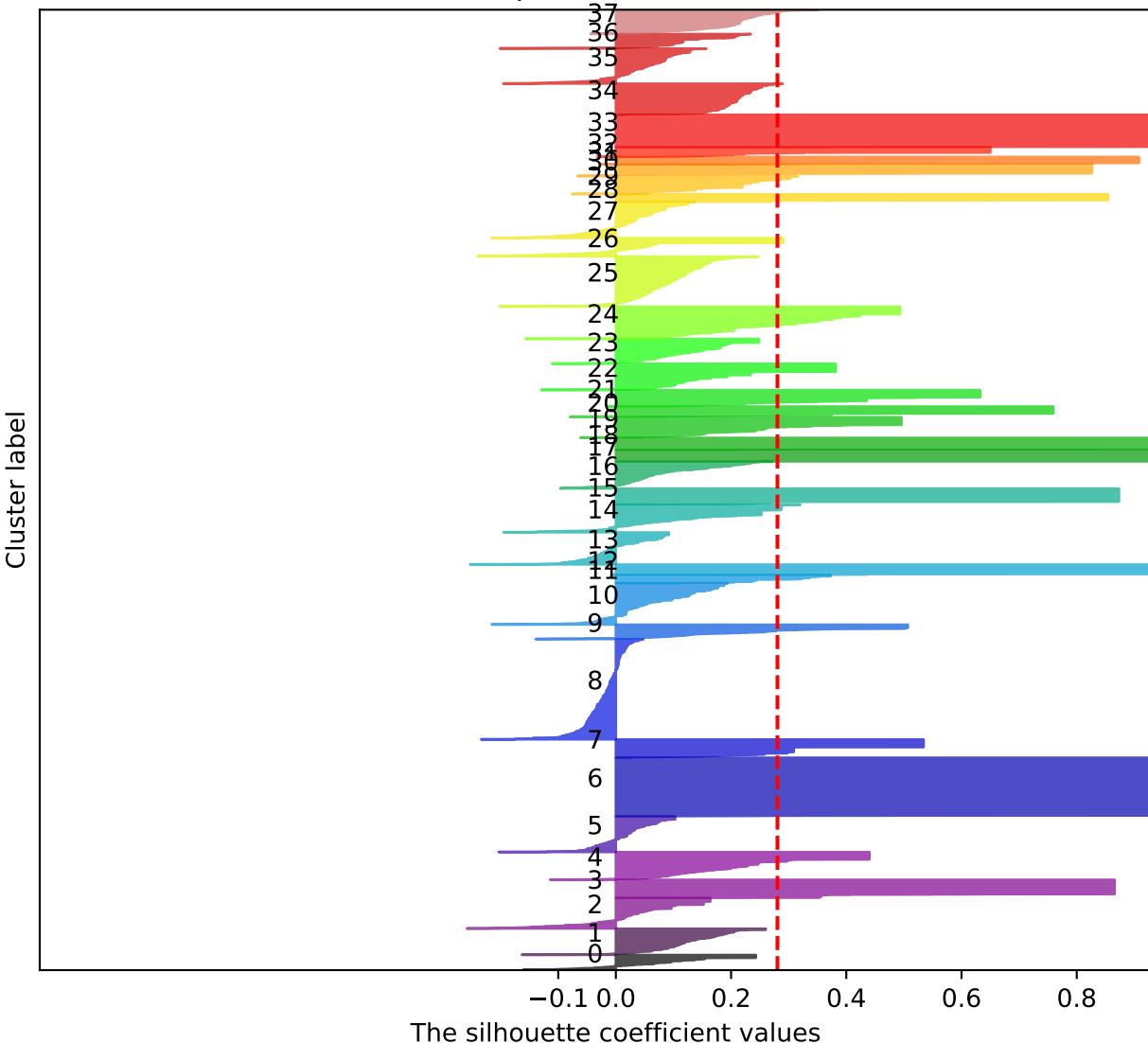


Silhouette analysis for KMeans clustering on sample data with n_clusters = 37 with Average Silhouette of: 0.2855075597630615

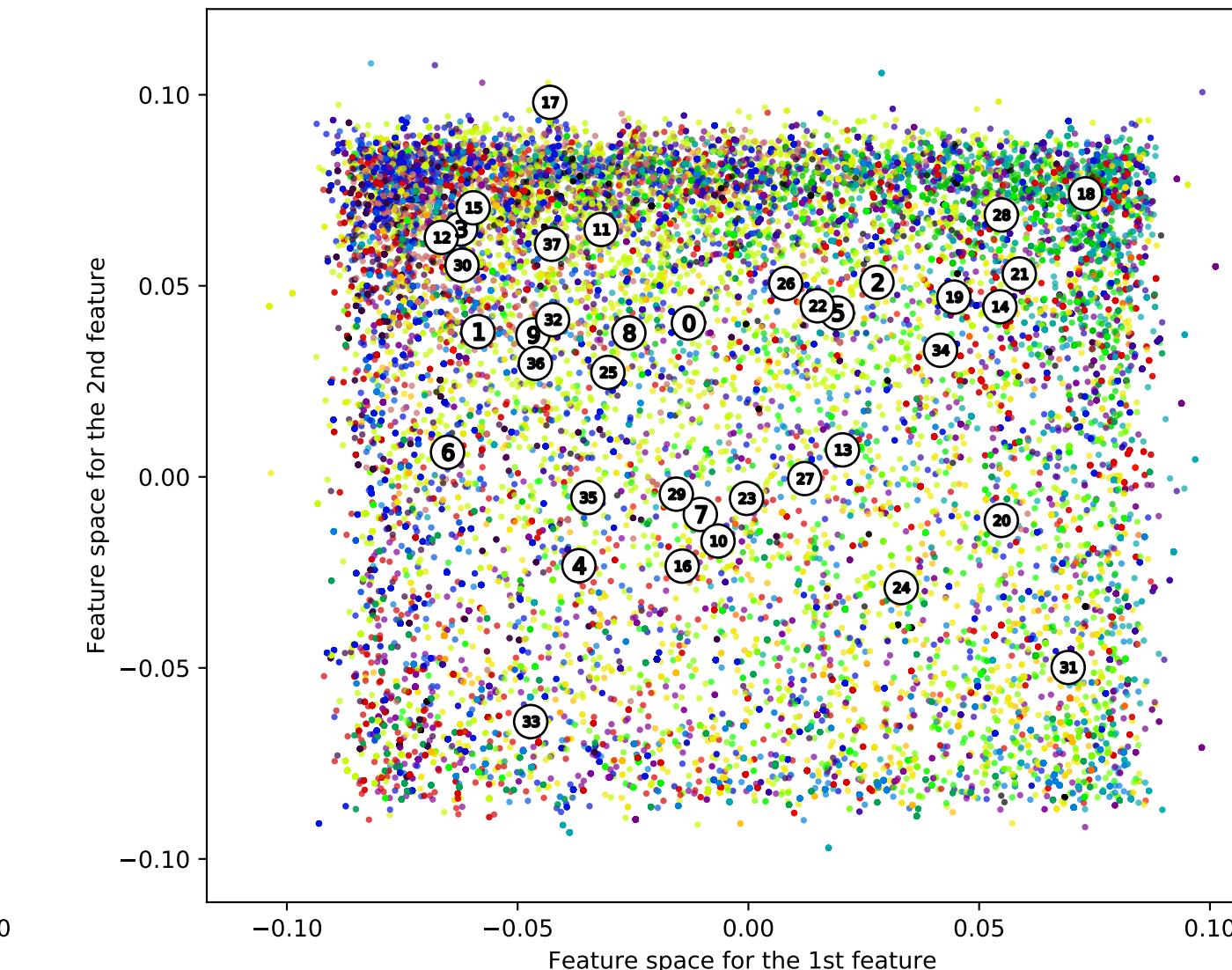


Silhouette analysis for KMeans clustering on sample data with n_clusters = 38 with Average Silhouette of: 0.28047290444374084

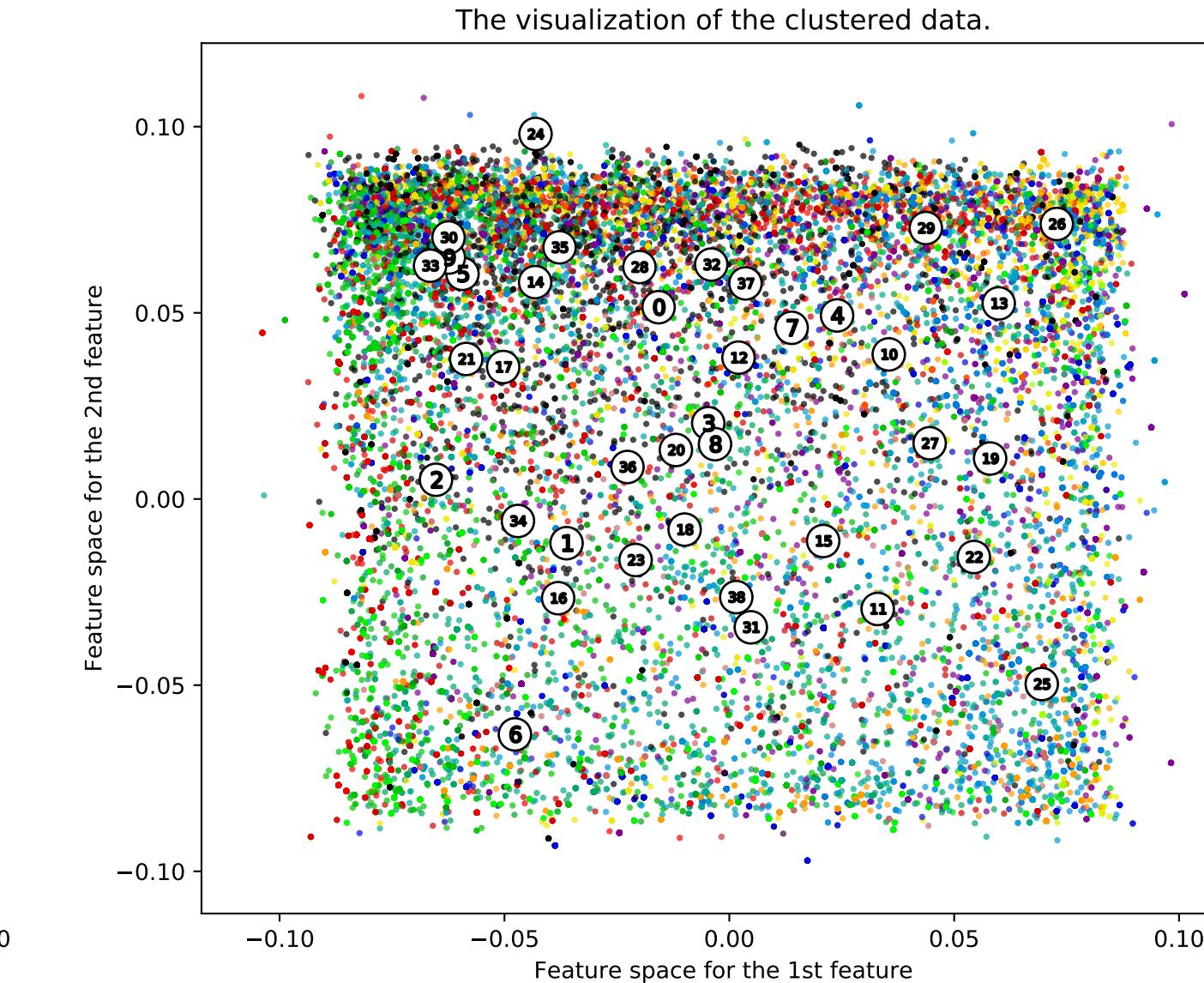
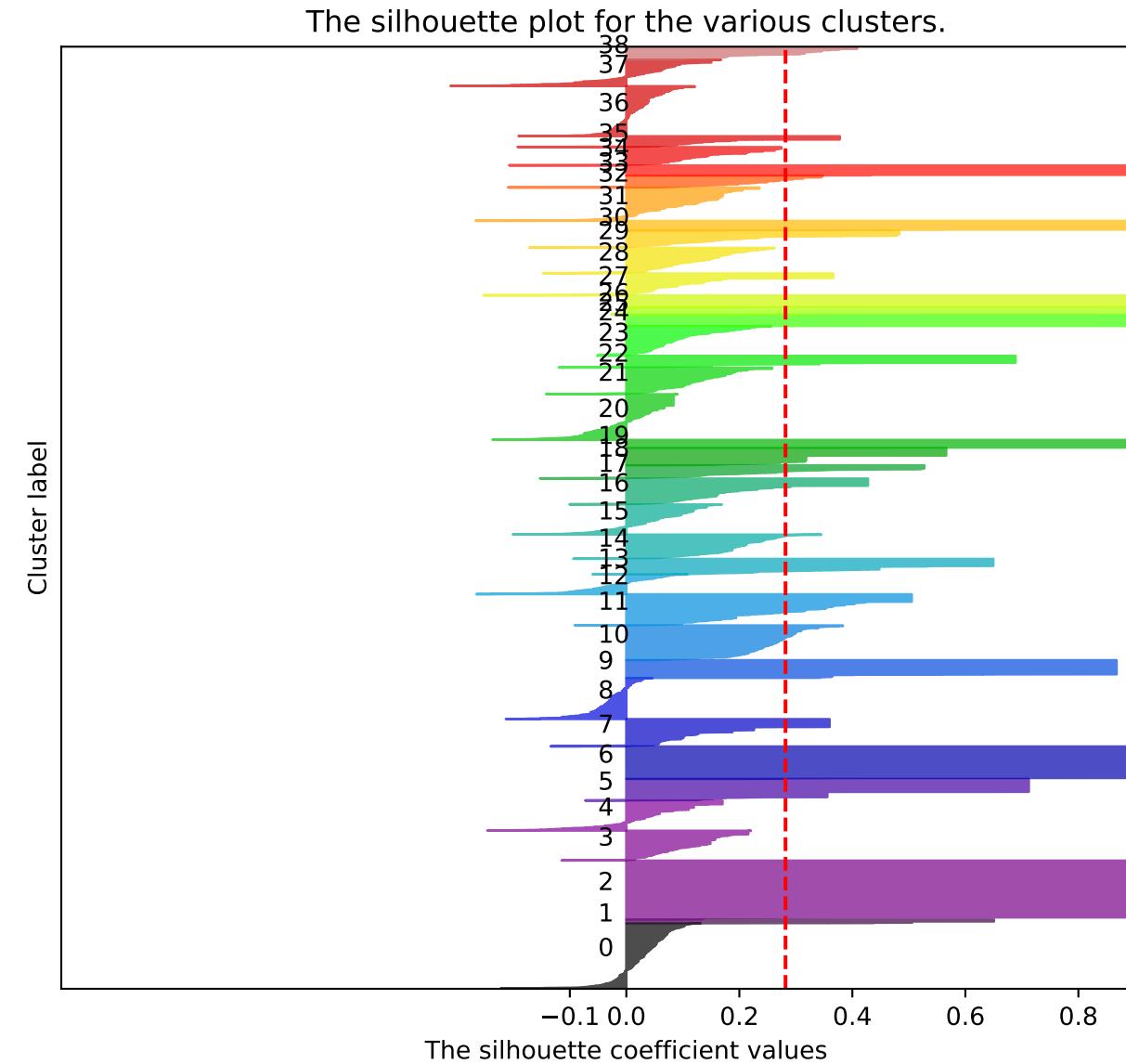
The silhouette plot for the various clusters.



The visualization of the clustered data.

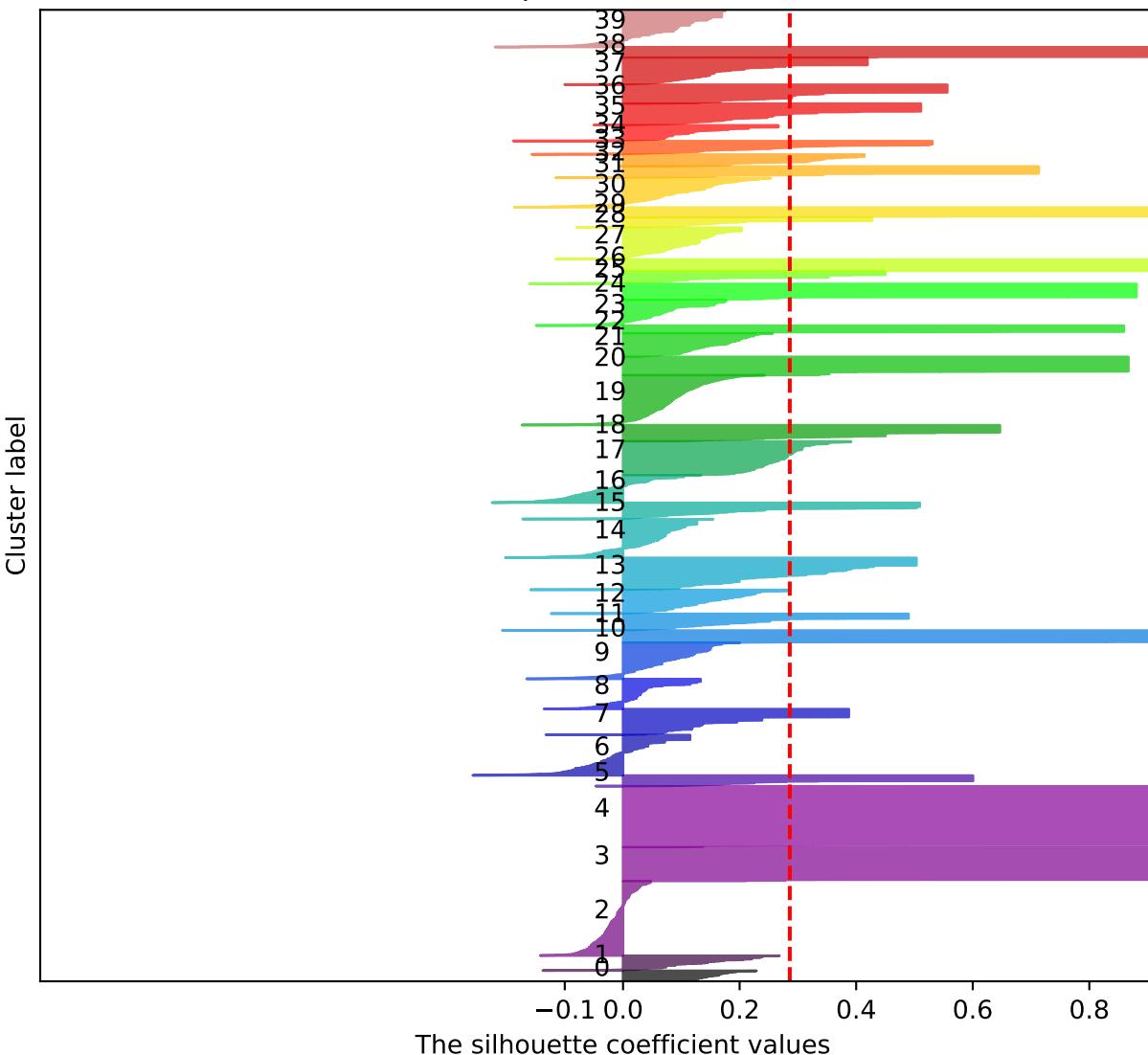


Silhouette analysis for KMeans clustering on sample data with n_clusters = 39 with Average Silhouette of: 0.28169211745262146



Silhouette analysis for KMeans clustering on sample data with n_clusters = 40 with Average Silhouette of: 0.28611457347869873

The silhouette plot for the various clusters.



The visualization of the clustered data.

